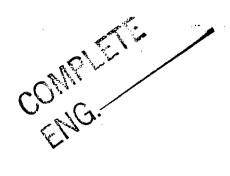
R-586-6-0-1





FINAL SCREENING SITE INSPECTION, PHASE II LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA EPA ID #: GAD980803696

> Prepared Under TDD No. F4-8809-07 CONTRACT NO. 68-01-7346

> > Revision 0

**FOR THE** 

WASTE MANAGEMENT DIVISION U.S. ENVIRONMENTAL PROTECTION AGENCY

JUNE 1, 1990

**NUS CORPORATION** SUPERFUND DIVISION

Prepared By

Reviewed By

Reviewed By

Approved By

Project Manager

Geologist

**Bob Donaghue Assistant Regional** 

Project Manager

Phil Blackwell Regional Project

Manager



#### NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency (EPA) under Contract Number 68-01-7346 and is considered proprietary to the EPA.

This information is not to be released to third parties without the expressed or written consent of the EPA.

#### **TABLE OF CONTENTS**

<u>Section</u>		Page No.
EXECUTIV	VE SUMMARY	ES-1
1.0 INT	TRODUCTION	1
1.1 Ob	jectives	1
1.2 Scc	ppe of Work	1
	E CHARACTERIZATION	2
	e Background and History	2
	e Description	16
	.1 Site Features .2 Waste Characteristics	16
. 2.2	.2 Waste Characteristics	18
	GIONAL POPULATIONS AND ENVIRONMENTS	21
	oulation and Land Use	21 21
	.1 Demography .2 Land Use	21
	face Water	21
	.1 Climatology	21
	.2 Surface Drainage	22
	.3 Potentially Affected Water Bodies	22
3.3 Grd	oundwater	22
	.1 Hydrogeology	22
	.2 Aquifer Use	23
3.4 Sur	mmary of Potentially Affected Populations and Environments	24
4.0 FIE	LDINVESTIGATION	25
	mple Collection	. 25
	.1 Sample Collection Methodology	25
	.2 Duplicate Samples	25
	.3 Description of Samples and Sample Locations	. 25
	nple Analysis .1 Analytical Support and Methodology	30 30
	.2 Analytical Data Quality	30
	.3 Presentation of Analytical Results	30
	4.2.3.1 Sandblast Area	31
	4.2.3.2 Overflow Sandblast Area	42
	4.2.3.3 Hazardous Waste Storage	42
	4.2.3.4 Basin	43
5.0 SU	MMARY	44
REFERENC	CES	45
APPENDI)	K A Topographic Map	
APPENDI)	, , , , , , , , , , , , , , , , , , , ,	
APPENDI)	(C Site Investigation Form	

#### **TABLE OF CONTENTS (continued)**

Section		Page No.
	TABLES **	
Table 1	Summary of Inorganic Analytical Results From Previous Studies (1983): Sediment Samples	4
Table 2	Summary of Organic Analytical Results, McLaren Environmental Engineering, Environmental Assessment - Sediment Samples	8
Table 3	Summary of Inorganic Analytical Results, McLaren Environmental Engineering, Environmental Assessment - Sediment Samples	10
Table 4	Summary of Organic Analytical Results, McLaren Environmental Engineering, Environmental Assessment - Soil Samples	. 11
Table 5.	Summary of Inorganic Analytical Results, McLaren Environmental Engineering, Environmental Assessment - Waste Sandblast Grit Samples	13
Table 6	Summary of Organic Analytical Results, McLaren Environmental Engineering, Environmental Assessment - Groundwater Samples	14
Table 7	Sample Codes, Descriptions, Locations, and Rationale	26
Table 8	Summary of Organic Analytical Results: Surface and Subsurface Soil Samples	32
Table 9	Summary of Inorganic Analytical Results: Surface and Subsurface Soil Samples	35
Table 10	Summary of Special Analytical Services: Surface and Subsurface Soil Samples	38
Table 11	Summary of Organic Analytical Results: Sediment Samples	39
Table 12	Summary of Inorganic Analytical Results: Sediment Samples	40
Table 13	Summary of Special Analytical Services: Sediment Samples	· 41
	FIGURES	
Figure 1 Figure 2 Figure 3 Figure 4	Site Location Map Site Layout Map Sample Locations From Previous Studies Sample Location Map	3 5 6 29

#### **EXECUTIVE SUMMARY**

Latex Construction is a ship building and repair facility situated on a natural inlet in the southernmost part of the town of Thunderbolt. The inlet was first used as an anchorage for private yachts and shrimp boats starting in the 1930s. In about 1963, the property was purchased, and the inlet was dredged. The dredge spoils were deposited in the southernmost portion of the property, which is now the south yard.

The facility builds and repairs both private and commercial vessels. The processes of greatest concern at the facility are sandblasting and painting. The hulls of newly built and previously painted boats are sandblasted in an open area adjacent to salt marshes. Both the blasting grit and the material being removed pose a potential threat to the environment. Poor housekeeping practices were observed at the facility, as evidenced by stained soils and solvent transfer in an uncurbed area.

The Latex Construction facility is located within the Atlantic Coastal Physiographic Province. Nearly horizontal sedimentary rocks comprise the water-bearing units of concern in the Savannah area. The surficial aquifer in the area is not used for domestic purposes. Sandy deposits of the surficial aquifer rest unconformably upon the Hawthorn Formation. The Hawthorn Formation, which is comprised of sandy silt, feldspathic, phosphatic sand, and a thick section of green silt and clay, acts as a confining layer. The underlying formations of Miocene, Oligocene, and Eocene ages are collectively termed the Floridan aquifer, the aquifer of concern in this area.

Surface water is the pathway of greatest concern. The facility is bordered by both the Wilmington River and Williamson Creek. Extensive salt marshes lie immediately south of the facility. The Wilmington River is subject to heavy commercial and recreational fishing pressures.

The air and onsite pathways are also of concern because there is a population of 1439 within 1 mile. Sandblasting at the facility may continue to release contaminated particles to the air.

Groundwater is of minor concern because the surficial aquifer is not used for potable water. The aquifer of concern in the Savannah area is the Floridan, which is confined by a thick, clay layer.

The field inspection of Latex Construction consisted of the collection of 17 environmental samples of sediment, surface, and subsurface soil. These samples were taken from four potential source areas and along likely migration pathways. Analytical results indicated the presence of a variety of organic

and inorganic contaminants at the facility. Contamination was found in each of the source areas and in both surface and subsurface soil samples. Contamination from the sandblast area also appears to be entering Williamson Creek and the salt marsh along its banks.

Based upon the field inspection and the enclosures, FIT 4 recommends that a Listing Site Inspection, Phase I, be initiated.

#### 1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) was tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Screening Site Inspection (SSI) Phase II at the Latex Construction site in Thunderbolt, Chatham County, Georgia. The inspection was performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and Superfund Amendments and Reauthorization Act of 1986 (SARA). The task was performed to satisfy the requirements stated in Technical Directive Document (TDD) number F4-8809-07. The field investigation was conducted the week of September 11, 1989.

#### 1.1 OBJECTIVES

The objectives of this inspection were to determine the nature of contaminants present at the facility and to determine if a release of these substances has occurred or may occur. Further, this inspection sought to determine the possible pathways by which contamination could migrate from the facility and the populations and environments it would potentially affect. Through these objectives, a recommendation was made regarding future activities at the facility.

#### 1.2 SCOPE OF WORK

The objectives were achieved through the completion of a number of specific tasks. These activities were to:

- Obtain and review background materials relevant to HRS scoring of site,
- Evaluate target populations within a 4-mile radius of the facility with regard to groundwater, surface water, air, and onsite exposure pathways,
- Develop a site sketch drawn to scale, and
- Collect 17 environmental samples.

#### 2.0 SITE CHARACTERIZATION

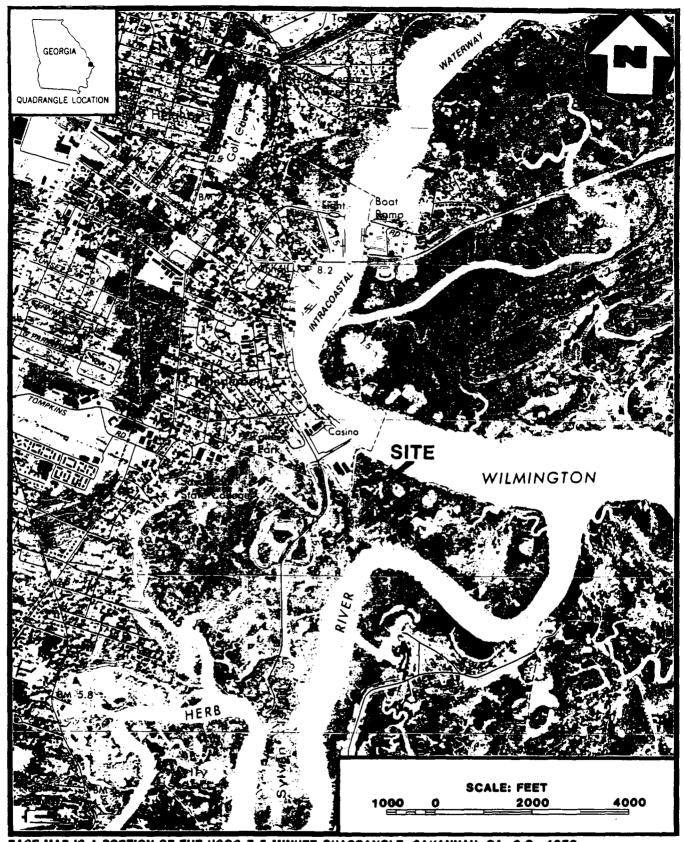
#### 2.1 SITE BACKGROUND AND HISTORY

Latex Construction is a ship building and repair facility located at 2136 River Road in Thunderbolt, Georgia. The site is situated on a natural inlet on the Wilmington River (Figures 1, 2). Thunderbolt Marine, Inc (TMI) owns the property on which the site is located. The site consists of the TMI marina, north yard, south yard, west storage area, and ship basin (Ref. 1, p. 3). This study centers on the south yard because most of the activities involving hazardous materials are conducted there.

Latex Construction repaired and serviced small ships, barges, tugs, etc, and also built pleasure boats from 1963 through 1986 (Refs. 1, p. 3; 2). In 1986 the north and south yards were leased to Lockheed Shipbuilding (Refs. 1, p. 3; 3). The facility is currently leased by Trinity Marine Group. Thunderbolt Shipbuilding and Repair, a division of Trinity Marine, which is in turn a subsidiary of Trinity Industries, Dallas, Texas has a sublease (Refs. 3, 4, 5):

The inlet was first used as anchorage for private yachts and shrimp boats starting in about 1930 (Refs. 1, p. 3; 2). It was common practice for shrimp boats to pump their bilges overboard (Ref. 1, p. 3). The property was purchased by the current owner, Thunderbolt Marine, Inc., in about 1963. The marina and dock were in place at that time (Ref. 1, p. 3). From about 1963 to 1986 the facility was operated by Latex Construction, a subsidiary of TMI (Refs. 1, p. 3; 4). During this time, sea walls were built around the basin, and the basin was dredged. The dredge spoils were used to create the south yard which had been a low-lying marshy area. Pilings were also driven into the south yard to stabilize the dredge materials. The previous use of the basin may have contaminated the spoils used to fill the south yard (Ref. 1, p. 3).

In 1983, a group of citizens known as "Friends of the Wilmington River" accused Latex of discharging heavy metals into Williamson Creek. Sediment samples (FW-1, FW-1', FW-2, FW-2'), taken by the citizens group near outfall pipes from the Latex facility, contained elevated concentrations of copper, lead, and zinc (Figure 3, Table 1) (Refs. 6, 7). Based on their samples, the citizens group attempted to block the approval of a dredging permit needed for the construction of a side-launch facility. In response to this, Latex Construction commissioned an independent study of sediments in the area to be dredged. The study concluded that metal concentrations in the sediments were within the normal ranges for the Savannah River (Table 1) (Refs. 8, 9). However, the background sample does not adequately represent background conditions because the sample was collected below the Highway



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, SAVANNAH, GA.-S.C., 1978. SITE LOCATION MAP LATEX CONSTRUCTION

THUNDERBOLT, CHATHAM COUNTY, GEORGIA

FIGURE 1
NUS
CORPORATION

TABLE 1

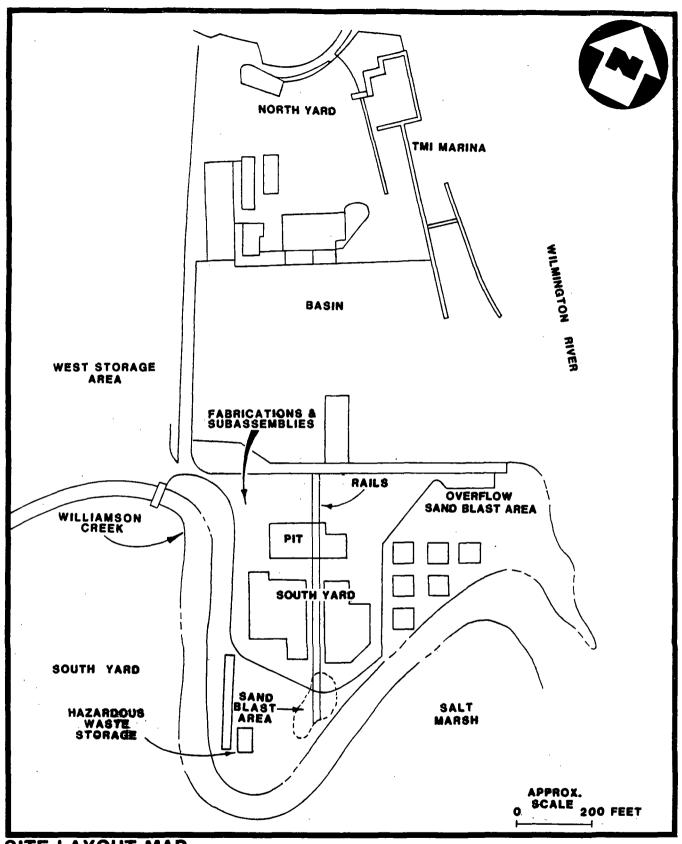
#### **SUMMARY OF INORGANIC ANALYTICAL RESULTS** FROM PREVIOUS STUDIES SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Williamson Creek Near Latex "Discrete Conveyances"				Wilmington River 2.8 Miles Downgradient	Control Sample Country Club Creek	Near Mouth of Williamson Creek	Creek Near Paint Shop	Wilmington River	Under Hwy. 80
PARAMETERS (mg/kg)	LC-FW-1 2/6/83	LC-FW-1' 2/6/83	LC-FW-2 2/6/83	LC-FW-2' 2/6/83	LC-FW-3' 2/6/83	LC-FW-4' 2/6/83	LC-LC-1 2/24/83	LC-LC-2 2/24/83	LC-LC-3 2/24/83	LC-LC-4 2/24/83
COPPER	68	640	110	- 180	1 1	6.6	16	42	31	96
LEAD	-	865	160	240	22	19	29	49	37	77
ZINC	920	2600	. 310	410	57	35	55	130	100	190

Material analyzed for but not detected above minimum quantitation limit

FW

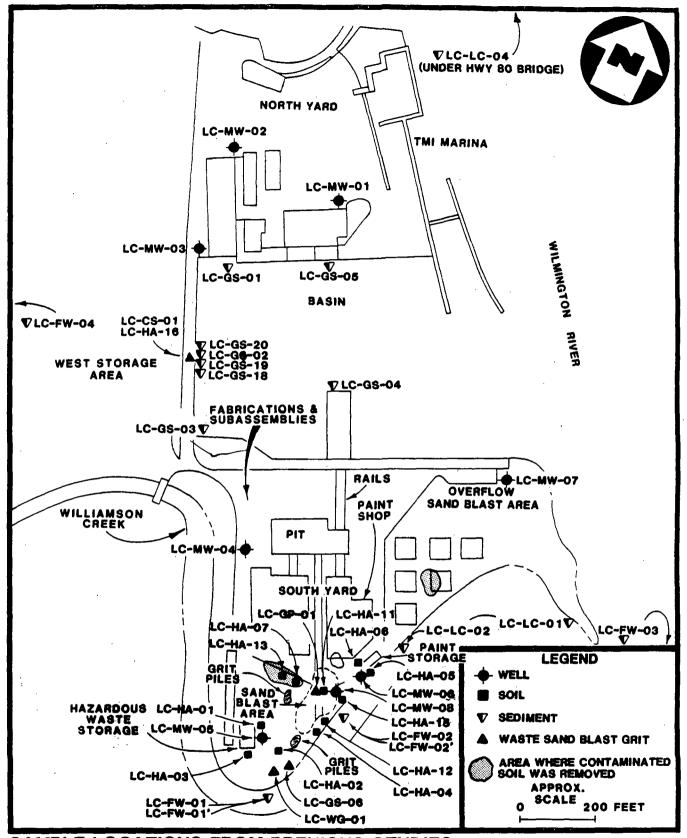
Study by Friends of the Wilmington River (Refs. 6, 7).
Study for Latex Construction by UGA-Marine Extension Service (Ref. 9). LC



SITE LAYOUT MAP
LATEX CONSTRUCTION
THUNDERBOLT, CHATHAM COUNTY, GEORGIA

FIGURE 2





SAMPLE LOCATIONS FROM PREVIOUS STUDIES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

FIGURE 3



80 bridge. This location likely receives runoff from the road in addition to sandblasting debris from bridge maintenance. Additional sampling was required prior to approval of the permit by the U.S. Army Corps of Engineers (COE). The construction permit (No. 074 OYN 004452) was granted, but the side-launch facility has not been built (Ref. 10).

In 1988 and 1989, an environmental assessment of the north and south yards was done for Lockheed Shipbuilding by McLauren Environmental Engineering. The assessment included the installation of monitoring wells and sampling of soil, sediment, sandblast grit, and groundwater. The samples were analyzed for a limited number of organic and inorganic compounds. Sediments in the ship basin were sampled. No volatile organic compounds were found (Table 2). Arsenic, copper, lead, mercury, and zinc were found in the sediments at anomalously high concentrations in some of the samples (Table 3) (Ref. 1). Thus, these compounds are likely to be site-related. The arsenic and copper may be from treated wood, such as pilings, used in the area. The other elements may be related to waste grit which was used as fill near sample locations GS-2, GS-18, GS-19, and GS-20 (Figure 3) (Refs. 1, 11).

Surface soil sampling in the south yard revealed three areas where runoff or leaking equipment had caused some contamination. All of the contaminated soil (45 cubic yards) in these locations was removed. Post excavation samples were taken, and no remaining contamination was detected. The excavated soil was disposed of at the Dean Forest Road Sanitary Landfill (Ref. 11, p. 10).

Also, surface soil contaminated with three organic solvents/fuel related compounds was found near the sandblasting area in the south yard. The highest concentration was 1500 ug/kg for total xylenes (Table 4) (Ref. 1).

Eleven heavy metals were found in waste sandblasting grit in concentrations three times the detection limits or greater. The highest concentrations for these are barium (100 mg/kg), chromium (71 mg/kg), cobalt (71 mg/kg), copper (2800 mg/kg), lead (1500 mg/kg), mercury (0.1 mg/kg), molybdenum (60 mg/kg), nickel (440 mg/kg), selenium (0.3 mg/kg), and zinc (2900 mg/kg) (Table 5) (Ref. 1). This waste grit has been used as fill material in at least one location on the property (Ref. 1, p. 16). Organic analysis was done on HA-16 where the grit was used as fill, and xylenes (110 ug/kg) were detected (Table 4) (Ref. 1).

Groundwater was analyzed for organics. The highest concentration found was 6.5 ug/kg of tetrachloroethylene in the well nearest the sandblast area (Table 6) (Ref. 1).

 $\dot{\gamma}$ 

The locations of samples of interest are shown on Figure 3, and the corresponding sample results are summarized in Tables 1 through 6 (Refs. 1, 11).

#### TABLE 2

# SUMMARY OF ORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	NW Corner	W. Central	SW Corner	Syncrolift	N. Central	W. Central		
Location in Basin PARAMETERS (ug/kg)	LC-GS-1 7/22/88	LC-GS-2 7/25/88	LC-GS-3 7/26/88	LC-GS-4 7/26/88	LC-GS-5 7/26/88	LC-GS-18 12/19/88	LC-GS-19 12/29/88	LC-GS-20 12/29/88
VINYL CHLORIDE	-	NA		-		NΑ	NΑ	NA
1,1-DICHLOROETHYLENE	-	NA		-		NΑ	NΔ	NA
1,1-DICHLOROETHANÉ		NA	-	-	-	NΑ	AM	NΑ
1,2 DICHLOROETHANE	-	NA	-	-	-	NΑ	NΑ	NA
CHLOROFORM		NA	-		-	NA	NΔ	NA
1,1,1-FRICHLOROETHANE	-	NA	-	-	-	NΑ	NΔ	NΦ
CARBON TETRACHLORIDE	-	NA			-	NA	NΔ	NA'
BROMODICHLOROMETHANE		. NA	-		-	NA	NΑ	NA
1,2 DICHLOROPROPANE	-	NA			-	NΑ	NA.	NA
BENZENE	-	NA	-	-	-	NA.	NΔ	NA
TRANS-1,2-DICHLOROETHYLENE	-	NA	-	-	-	NA	NΑ	NA
BROMOFORM	-	NA		-	-	NA	, NA	NA
TETRACHLOROETHYLENE .	-	NΑ			-	NA	NA	NA
TOLUENE	-	· NA			-	NA	NA	NA
CHLOROBENZENE	-	NА	-		-	NA	. NA	NA
ETHYL BENZENE	-	AΝ	-		-	NA	NA.	NA

Material analyzed for but not detected above minimum quantitation limit

NA Not analyzed

NOTE: Data from References 1, 11

#### TABLE 2

# SUMMARY OF ORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	NW Corner	W. Central	SW Corner	Syncrolift	N. Central		W. Central	
Location in Basin PARAMETERS (ug/kg)	LC-GS-1 7/22/88	LC-GS-2 · 7/25/88	LC-GS-3 7/26/88	LC-GS-4 7/26/88	LC-GS-5 7/26/88	LC-GS-18 12/19/88	LC-G5-19 12/29/88	LC-GS-20 12/29/88
TOTAL XYLENES	-	NΑ	-	·	-	NA	NA	NA
1,2-DICHLOROBENZENE	-	. NA	-		-	NA	NΑ	NA
1,3-DICHLOROBENZENE	-	NA .		-	-	NA	NA	NA
1,4-DICHLOROBENZENE	-	. NA	-	-	-	NA	NA	NA ,
TRICHLOROFLUOROMETHANE	-	. NA		-	-	NA	NA	NA
TRICHLOROETHYLENE	-	NΑ	-		-	NA	NA	NA
CHLORODIBROMOMETHANE		NA			-	NA .	NA ·	NA

Material analyzed for but not detected above minimum quantitation limit

NA Not analyzed

NOTE: Data from References 1, 11

TABLE 3

# SUMMARY OF INORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	NW Corner	W. Central	SW Corner	Syncrolift	N. Central		W. Central	
Location in Basin PARAMETERS (mg/kg)	LC-GS-1 7/22/88	LC-GS-2* 7/25/88	LC-GS-3 7/26/88	LC-GS-4 7/26/88	LC-GS-5 7/26/88	LC-GS-18 12/19/88	LC-GS-19 12/29/88	LC-GS-20 12/29/88
ANTIMONY	-	5	-		-	6	8	8
ARSENIĆ .	7.5	1	0.9	0.9	1	4	4	3
BARIUM		-	-		-	-	-	10
BERYLLIUM	0.5	-	-	-	-		0.5	0.5
CADMIUM	-	-	-			-		-
CHROMIUM	14	21	14	14	19	10	19	· 20
COBALT	2	6	2	2	5	20	3	4
COPPER	10	71	7	8	12	20	29	76
LEAD	10	51	10	10	20	20	30	48
MERCURY		0.24	-	-	-	0.09	0.03	0.2
NICKEL	. 5	. 10	4	4	· 4	5	8	9
SELENIUM	0.1	-	0.1	0.1	0.1	0.1	0.1	0.2
THALLIUM	20	20	20	20	.20	-	-	-
VANADIUM	20	10	10	10	20	8	20	. 20
ZINC	28	240	21	25	35	38	41	19

Material analyzed for but not detected above minimum quantitation limit

NOTE: Data from References 1, 11

<sup>\*</sup> Reported in McLaren Environmental Summary Table as GS-2 but data sheets indicate it is GS-1 (Ref. 12).

#### **TABLE 4**

## SUMMARY OF ORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SOIL SAMPLES LATEX CONSTRUCTION

#### THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Hazardo	ous Waste St	orage	Sa	andblast Area	1	Paint Storage	Paint Shop	Drain from S	_	Gr Stor		Grit Used as Fill
PARAMETERS (ug/kg)	LC-HA-1 7/22/88	LC-HA-2 7/23/88	LC-HA-3 7/23/88	LC-HA-4 7/23/88	LC-HA-11 7/23/88	LC-HA-12 7/25/88	LC-HA-5 7/23/88	LC-HA-6 7/27/88	LC-HA-7 7/22/88	LC-HA-13 7/27/88	LC-HA-15 7/27/88	LC-GS-6 7/27/88	LC-HA-16 7/27/88
DEPTH (feet)	3.0-3.2	3.0-3 2	1.8-2.0	0.5-1.0	2.5-3 0	0 5-1.0	0.5-1.0	0.3-0.5	3 0-3.2	0.5-3.0	0.5-1.0	-	1.0-1.3
VINYL CHLORIDE	NA	-	NA	-			-	NA	NΑ			-	-
1,1-DICHLOROETHYLENE	NA	-	NA	-				NA	NA	-	-	-	-
1,1-DICHLOROETHANE	NΑ		NA	-				NΑ	NA				-
1,2-Dichloroethane	NA	-	NA	-			-	NA	NA	-			
CHLOROFORM	NΑ	-	NΑ	-	-	·	-	NA	, NA	-	-		-,
1,1,1-TRICHLOROETHANE	NA	-	NA	-			-	NA.	NA	-		-	
CARBON TETRACHLORIDE	NA	-	NA	-	-		-	NA	NA	-	-	-	-
BROMODICHLOROMETHANE	NA	-	NA		-			NA	NA.	-	-	-	-
1,2-DICHLOROPROPANE	NA	-	NA	-	-	-		NA	NA		-	-	
TRANS-1,2-DICHLOROETHYLENE	NΑ	-	NA	-		-	-	NA	NA			-	-
BROMOFORM	NA	-	NA		-	-	-	NΑ	NA			-	
TETRACHLOROETHYLENE	NΑ	-	NA		-	-		NA	NA		-	-	
ETHYL BENZENE				-	-	-		-	-	200	%		
TOTAL XYLENES		-	-					-		1500	900		110

Material analyzed for but not detected above minimum quantitation limit

NA Not analyzed

NOTE: Data from Reference 1

#### TABLE 4

## SUMMARY OF ORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SOIL SAMPLES LATEX CONSTRUCTION

#### THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Hazardous Waste Storage			Sandblast Area			Paint Storage	Paint Shop	Drainage from Shops		Grit Storage		Grit Used as Fill
PARAMETERS (ug/kg)	LC-HA-1 7/22/88	LC-HA-2 7/23/88	LC-HA-3 7/23/88	LC-HA-4 7/23/88	LC-HA-11 7/23/88	LC-HA-12 7/25/88	LC-HA-5 7/23/88	LC-HA-6 7/27/88	LC-HA-7 7/22/88	LC-HA-13 7/27/88	LC-HA-15 7/27/88	LC-GS-6 7/27/88	LC-HA-16 7/27/88
TRICHLOROFLUOROMETHANE	NΑ	-	· NA	-		20	-	NA	NA	-			
TRICHLOROETHYLENE	NΔ	-	NÁ		-		-	NA	NA	-	-	-	
CHLORODIBROMOMETHANE	NA	-	NA		-	-		NA.	NA			-	

Material analyzed for but not detected above minimum quantitation limit

NA Not analyzed

NOTE: Data from Reference 1

**TABLE 5** 

# SUMMARY OF INORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT SANDBLAST GRIT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

PARAMETERS (mg/kg)	LC-CS-1 8/11/88	LC-WG-1 8/11/88	LC-GP-1 8/11/88
ANTIMONY	6		-
ARSENIC	-	-	-
BARIUM	100	80	90
BERYLLIUM	5	0.9	0.9
CADMIUM	0.9	0.7	0 7
CHROMIUM	71	26	36
COBALT	28	6	17
COPPER	2800	730	960
LEAD	1500	230	640
MERCURY	0.1	0.1	0.05
MOLYBDENUM	60		20
NICKEL	440	62	76
SELENIUM	0.2	0.2	0.3
SILVER			·
THALLIUM		-	-
VANADIUM	9	7	10
ZINC	2900.	2100	2100

- Material analyzed for but not detected above minimum quantitation limit NOTE: Data from Reference 1

#### **TABLE 6**

#### SUMMARY OF ORGANIC ANALYTICAL RESULTS McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT **GROUNDWATER SAMPLES** LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

		North Yard		West of Pit	Haz. Waste Storage	NE of Sandblast Area	Overflow Sandblast Area	Sandblast Area
PARAMETERS (ug/l)	LC-MW-01 7/28/88	LC-MW-02 7/28/88	LC-MW-03 7/28/88	LC-MW-04 7/28/88	LC-MW-05 7/28/88	LC-MW-06 7/28/88	LC-MW-07 7/28/88	LC-MW-08 7/28/88
ETHYL BENZENE		-	·	-	_	<del>-</del>	-	-
TOTAL XYLENES	-	-		-	-	-	-	-
1,2-DICHLOROBENZENE	-	-	-		-	-		-
1,3-DICHLOROBENZENE	-	-	-	-	-		-	
1,4-DICHLOROBENZENE		-		-	-	-		-
TRICHLOROFLUOROMETHANE	-	-	-	-	-			
TRICHLOROETHYLENE	-		-	1	-	-	-	5
CHLORODIBROMOMETHANÉ	-	-	-	-	-			-

- Material analyzed for but not detected above minimum quantitation limit

Note: The above is a complete list of organic compounds analyzed for during this study (Ref. 1).

#### **TABLE 6**

#### **SUMMARY OF ORGANIC ANALYTICAL RESULTS** McLAREN ENVIRONMENTAL ENGINEERING ENVIRONMENTAL ASSESSMENT **GROUNDWATER SAMPLES** LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

		North Yard		West of Pit	Haz. Waste Storage	NE of Sandblast Area	Overflow Sandblast Area	Sandblast Area
PARAMETERS (ug/l)	LC-MW-01 7/28/88	LC-MW-02 7/28/88	LC-MW-03 7/28/88	LC-MW-04 7/28/88	LC-MW-05 7/28/88	LC-MW-06 7/28/88	LC-MW-07 7/28/88	LC-MW-08 7/28/88
VINYL CHLORIDE		-	-		· -	-	-	-
1,1-DICHLOROETHYLENE	-	-		-		-	-	-
1,1-DICHLOROETHANE	-	-	-			-	-	-
1,2-DICHLOROETHANE	-	-	-	-	-	-		
CHLOROFORM	-	-				-	-	-
1,1,1-TRICHLOROETHANE	-	-	-		-		-	-
CARBON TETRACHLORIDE	-	-	-		-	-	-	-
BROMODICHLOROMETHANE .	-	-	-		-	-	- ·	-
1,2-DICHLOROPROPANE	-	-	-	-		-	-	-
BENZENE	-	-	-	-	-	-	-	2
TRANS-1,2-DICHLOROETHYLENE .	-	-	-	-	-	-		-
BROMOFORM	-		-	-			-	-
TETRACHLOROETHYLENE	0.5	-			-	-	-	6.5
TOLUENE	-		-	-	-	-	-	2
CHLOROBENZENE	-			-	-	-	-	-

- Material analyzed for but not detected above minimum quantitation limit

Note: The above is a complete list of organic compounds analyzed for during this study (Ref. 1).

The facility is identified by three EPA identification numbers: Latex Construction (GAD980803696) and Lockheed Shipbuilding (GAD984268615 and GAD981223688) (Ref. 13). Lockheed Shipbuilding was granted generator status on October 30, 1986. The notification identified nonhalogenated solvents (F003) as the waste being produced (Refs. 14, 15). The organic contaminants found near the sandblast area can be components of F003 (Refs. 1, 14). Trinity reported that Lockheed Shipbuilding had transferred their EPA ID numbers for air emissions and generator permits to Trinity (Ref. 16). However, the state reported that Lockheed had requested that their generator file be closed (Ref. 15). Trinity stated that they have been filing all required forms with the state under the Lockheed ID numbers. Trinity will investigate this matter (Ref. 16).

As a result of a complaint, the state conducted an inspection of the facility on April 2, 1990. At this time, the facility was in the process of terminating operations. Fewer than ten workers are employed by the facility, and their responsibilities are limited to site cleanup and maintenance. As the result of this inspection, the facility was issued a Notice of Violation for minor infractions. No evidence was found to support the citizen complaint concerning the discharge of wastes from the facility (Ref. 5).

#### 2.2 SITE DESCRIPTION

#### 2.2.1 Site Features

The site consists of the south yard (about 8 acres), the ship basin (7 acres), TMI marina and north yard (about 7 acres), and west storage area (about 5 acres) (Ref. 11, p.12) (Appendix A). The property is partly fenced restricting access from land. However, access from the Wilmington River and Williamson Creek is unrestricted (Ref. 17, pp. 34). The property is also guarded (Ref. 17, p. 3).

The south yard is bordered on the north by the ship basin, on the east by the Wilmington River, and on the south and west by Williamson Creek. The facilities in the south yard include machine, pipe cutting, and electrical shops; a paint shop; paint storage sheds; hazardous materials storage area, assembly areas, transfer pit, and a sandblast area (Ref. 1, pp. 8-12).

The paint shop is located on the east side of this yard (Figure 2). A consultant for the property owner reported that the floor drains in the paint shop may drain into the adjacent salt marsh (Ref. 17, p. 13). However, this remains unconfirmed. Workers were observed transferring solvents from one 55-gallon drum to another at the south end of the paint shop in an undiked area which sloped towards a storm drain (Ref. 17, p. 10). Painting is done in the paint shop, the sandblast area, and the

overflow sandblast area (Refs. 1, p. 9; 17, p. 11). Paint storage sheds are located southeast of the paint shop (Refs. 1, p. 9; 17, pp. 4, 5).

The hazardous waste storage area contains two large waste oil tanks in a diked area. The storage area was constructed by Lockheed in 1978 (Ref. 1, pp. 3, 10). A stain measuring 31 feet by 17 feet and having a petroleum-like odor was observed on the west side of the storage area. A facility representative claimed that the stain was sandblasting grit, which they used as fill material around the property (Ref. 17, pp. 8, 23). Another area of stained soil measuring 30 feet by 10 feet was found on the east side and appeared to have come from a plastic pipe inserted into the top of one of the waste oil tanks (Ref. 17, pp. 16, 23). The diking around the waste oil tanks has a drain valve, and a small stain was observed beneath it (Ref. 17, p. 9). During the time that Lockheed operated the facility, the liquid that collected within the diking was periodically drained to the ground (Ref. 1, p. 10). A number of other small stains were scattered around the south yard (Ref. 17, p. 11). A number of drums were observed on the ground and on palates outside of the hazardous waste storage area. Reportedly, the week prior to the inspection, the drums in the storage area had been scattered about the yard (Ref. 17, p. 13). In 1988, when Lockheed had the property assessed, drums of solvent and portable fuel tanks were seen on the ground outside of the hazardous waste storage area (Ref. 1, p. 10).

Ships are brought to the sand blast area from the ship basin via a rail system. The ships are first placed on rolling cradles and lifted from the water on the syncrolift. The vessel is then rolled south to the transfer pit, where it can then be moved east or west to one of the shops or sandblast area. The sandblast area has been in use between 12 and 14 years and is in the southeast portion of the south yard (Ref. 17, p. 8). Sandblast grit is kept uncontained; two piles and a thick covering of grit were observed in the sandblasting area (Ref. 17, pp. 18-19).

The overflow sandblast area (a.k.a. subassembly platens) is located in the north part of the south yard. Lockheed used this area for assembly of vessels. Some sandblasting, painting, and paint and drum storage has occurred in this area (Refs. 1, p. 11; 17).

A metal shed surrounded by a variety of junk, including an empty 55-gallon drum formerly containing methyl ethyl ketone (MEK), is located near the south end of the yard (Ref. 17, pp. 9, 34). Two deteriorated paper drums containing a pliable, pink, solid and a small amount of red liquid; and a discarded oil boom were located in the north part of the south yard (Ref. 17, pp. 33, 34).

The basin is used for the transfer of components from the north yard to the south yard. TMI dredge barges and ships built in the yard also dock here. A syncrolift is located in the center of the south side of the basin (Ref. 1, p. 12).

The north yard and TMI marina are bordered on the north by River Road, on the east by the Wilmington River, on the south by the ship basin, and on the west by Sylvan Island Road (Ref. 1, p. 14) (Figure 2). Two aboveground fuel storage tanks are located near the northwest corner of the north yard. Fuel from these tanks is delivered to the TMI marina via underground lines. Metal stock is stored in the north yard. Activities carried out in the north yard include welding, cutting of metal stock using both hydraulic and plasma cutters, vehicle and equipment maintenance, a minor amount of parts cleaning, descaling of raw steel with steel shot, priming of steel, and painting in an automated spray booth (Ref. 1, pp. 5-7). Reportedly, Lockheed disposed of the overspray filters with the general facility trash (Ref. 1, p. 7). The TMI marina is used by private pleasure crafts (Ref. 1).

The west storage area is located on the west side of Sylvan Island Road and is bordered by salt marsh on the south and west. This area was used by Lockheed for equipment storage (Ref. 1, pp. 7-8) (Appendix A). The area is currently used by the TMI dredging company (Ref. 17, pp. 4-5).

#### 2.2.2 Waste Characteristics

An important part of ship construction and maintenance is the application of marine coatings to prevent fouling by marine organisms and corrosion. Marine coatings are comprised of three parts: an organic solvent to thin the binder in order to allow application, an organic binder to create a continuous solid film upon curing, and a pigment. Antifouling paints most commonly contain cuprous oxide and/or organotin compounds that are the active biocidal agent. The paint may also contain a leaching agent or rosin to allow controlled release of the active ingredient. The most common marine anticorrosive coatings are vinyls, chlorinated rubbers, epoxies (especially polyamide-cured varieties), urethanes, polyesters, inorganic zincs, and zinc-rich organics (Ref. 18).

Among the trialkyl tins (a class of organotin compounds), tributyl tin is known for providing the best balance of fungicidal and bacterial activity and mammalian toxicity (Ref. 19, p. 59). Triorganotins are also preferred antifoulants because they degrade into alkylated species and nontoxic inorganic tin, once liberated from the paint (Ref. 19, p. 60).

The toxicity of organotin compounds depends upon the type of organic groups bonded to the tin. In trialkyl tin compounds, the toxicity typically decreases as the length of the alkyl groups increases. As a class, the triorganotin compounds are the most toxic followed in order of toxicity by the

diorganotins and the monoorganotins, with some exceptions. The oral  $LD_{50}$ 's (rat) range from 133 to 200 mg/kg for tributyl tin compounds and from 126 to 800 for dibutyl tin compounds (Ref. 19).

In the body, organotins are found distributed mainly in the blood and liver with a lesser amount in the muscle, spleen, heart, or brain (Ref. 20). Most trialkyl tins have been studied and cause acute chemical burns or subacute dermal irritation, as well as encephalophy and cerebral edema (Refs. 19, 20). Dermal absorption of tributyl tin halides is possible as evidenced by systematic effects observed in rabbits (Ref. 19). On March 1, 1990, a rule restricting the use of tributyl tin antifoulant paints became effective. The application of these paints can only be done by specially trained, certified commercial applicators (Ref. 21).

Surfaces must be prepared by sanding or abrasive blasting to obtain adequate bonding. This creates the potential for air release of fine particulates. Settling of the particulates and subsequent washdown creates the potential for release to soil, surface water, and sediments (Ref. 18). Particles entering surface water near Thunderbolt are likely to be trapped in sediments with little migration from the point of discharge (Ref. 22).

Much of the sand blasting currently conducted is done on previously painted boats, but some is also-done to remove fire scale and rust from new ships (Refs. 3; 17, p. 10). Reportedly, the bilges (hull interior) of ships being sandblasted are drained to an unlined pit between the rails in the sandblast area (Ref. 17, p. 10). During this inspection, sandblast grit was found between the rails to a depth of 10 feet. The accumulated grit between the rails is periodically removed to facilitate access to all parts of the hull. Sandblasting is not conducted under any type of cover to prevent particles from migrating into the adjacent salt marsh (Ref. 17, p. 34). The grit in the sandblast area was about 1 foot deep (Ref. 17, p. 19). Sandblast grit was found among the marsh grasses and in the sediments of Williamson Creek adjacent to the sandblast area (Ref. 17, p. 32). The total volume of sandblast grit in the area is estimated to be 837 cubic yards (Ref. 23). Both natural materials and a manmade silica sand have been used for sandblasting (Refs. 1, p. 9; 3).

Black Beauty (2) the sandblasting grit currently used by the facility, is a by-product of coal combustion (Refs. 17, p. 6; 24). Typically, it is a fused, ferro-alumino-silicate in the form of a noncrystalline glass. The manufacturer is Reed Minerals of Highland, Indiana (Ref. 24). The Material Safety Data Sheet for these materials states that the uncontaminated product is not EP toxic and is considered inert (Ref. 25). Analysis of the material was provided by the manufacturer and indicates that the pure product may contain arsenic and beryllium (Ref. 26). An analysis of the mineral content was also provided (Ref. 27). A 1983 analysis of the Latex Construction waste grit (the trade name of the grit used at that time is unknown) revealed the presence of lead (Ref. 28).

The overflow sandblast area, which is currently used for a limited amount of painting, was partially covered by a thin layer of sandblast grit (Ref. 17, pp. 11, 34). Three roll-on, roll-off dumpsters were located in this area. One dumpster was filled with crushed drums and discarded gas cylinders, and the other two were filled with debris. This area appeared to have been recently cleaned (Ref. 17, pp. 4, 5, 12).

The current head of safety and security for Thunderbolt Shipbuilding reported that most painting is done in dry dock, but some touchup work may be done in the water. Oil booms are put in place, and absorbent materials are kept on hand whenever work is done in the water (Ref. 3).

Other hazardous materials known to have been used at the facility include solvents (i.e. MEK, methyl isobutyl ketone, xylene), hydraulic oil, freon, and automatic transmission fluid (Ref. 1). Trinity's hazardous waste is collected by Ashland Chemical as was Lockheed's waste (Refs. 1, p. 4; 17, p. 8). The waste sandblast grit is disposed of in a local landfill (Ref. 17, p. 13). Storm drains and perhaps floor drains from some of the buildings discharge to the basin and Williamson Creek (Refs. 1; 17, pp. 4, 5, 13; 29).

Although the hazardous waste storage and sandblast area are potential sources of greatest concern, there are a number of stains throughout the south yard. There is also evidence that sandblast grit has been used as fill in numerous areas. Since the south yard was constructed from dredge spoils from the basin, there is the possibility that the soils throughout the entire yard are contaminated.

#### 3.0 REGIONAL POPULATIONS AND ENVIRONMENTS

#### 3.1 POPULATION AND LAND USE

#### 3.1.1 Demography

The site is located in a small, industrial area surrounded by residential neighborhoods. All of the city of Thunderbolt (population 2576) and a large portion of Savannah lie within 4 miles of the site (Appendix A) (Ref. 30). The total population within a 4-mile radius of Latex Construction is estimated as 80,303 based on the 1980 U.S. Census. The population distribution is 1459 people between 0 and 1 mile, 16,152 between 1 and 2 miles, 27,823 between 2 and 3 miles, and 34,869 between 3 and 4 miles (Ref. 31).

There are two schools close to the facility. Thunderbolt Elementary is located 2800 feet to the northwest and has a student population of 682 (Ref. 32) (Appendix A). Savannah State College is located 2800 feet west of the Latex property and has a student body of about 2200 and a faculty of about 500 (Ref. 33) (Appendix A).

#### 3.1.2 Land Use

The facility is located in the southernmost portion of Thunderbolt. The areas to the south and east are sparsely populated, while areas to the north and west are densely populated suburbs of Savannah. Almost the entire town of Thunderbolt lies within 1 mile of the shipyard. The closest residence lies about 100 feet to the north. The facility is bordered by extensive salt marshes on the south and west (Appendix A).

#### 3.2 SURFACE WATER

#### 3.2.1 Climatology

The climate is characterized by mild temperatures and abundant rainfall. The area's net annual precipitation is approximately 4 inches, and the 1-year, 24-hour rainfall is approximately 3.5 inches (Refs. 34, 35).

#### 3.2.2 Surface Drainage

Surface water runoff from the facility flows directly into Williamson Creek, which flows into a tidal portion of the Wilmington River, or runoff may flow directly into the river. The river then continues south for 2 miles before breaking into a number of channels, which enter the Atlantic Ocean within 15 stream miles of the facility. Both Williamson Creek and the Wilmington River are subject to tidal flushing and are bordered by extensive salt marshes (Ref. 17) (Appendix A).

#### 3.2.3 Potentially Affected Water Bodies

All the coastal rivers and creeks in this area are used for recreational fishing (Refs. 17, p. 30; 36). The Savannah River in Chatham County and Wassaw Sound support a significant amount of commercial fishing. Commercially harvested species include crab, clams, conch, carp, shad, and sturgeon (Ref. 37). The Wilmington River supports a commercial crab fishery, and the extensive salt marshes provide a recruitment area for shrimp (Ref. 38). There is also commercial fishing for Eastern Oysters in Wassaw Sound (Ref. 39).

Some endangered or threatened species, including Shortnosed Sturgeon (<u>Acipenser brevirostrum</u>), Atlantic Green Sea Turtle (<u>Chelonia mydas</u>), Hawksbill Turtle (<u>Eretmochelys</u>), Brown Pelican (<u>Pelecanus occidentalis carolinesis</u>), West Indian Manatee (<u>Trichechus manatus</u>), and Bald Eagle (<u>Haliaeetus leucocephalus</u>) may be found in the Savannah Area (Ref. 40). However, there are no critical habitats designated in Chatham County (Ref. 41). There are nesting areas for the Loggerhead Turtle (<u>Caretta caretta</u>) along coastal beaches in the area (Ref. 39).

#### 3.3 GROUNDWATER

#### 3.3.1 Hydrogeology

The Savannah area is located within the Atlantic Coastal Physiographic Province. Nearly horizontal sedimentary rocks that gently dip to the southeast comprise the water-bearing units of concern in the Savannah area. Surficial sediments of Quaternary age form the Savannah area's surficial aquifer (Ref. 42, plate 7, p. 15). This surficial unit is composed mainly of sand and is generally less than 80 feet thick in the Savannah area (Ref. 43). Groundwater from the surficial aquifer is adequate for domestic use in some inland areas; however, near the ocean and along tidal estuaries, brackish water is often encountered (Ref. 44, pp. 33-37). Sandy deposits of the surficial aquifer rest unconformably upon the Hawthorn Formation (Ref. 45, p. 14). The Hawthorn Formation is of Miocene age and is composed of sandy silt, feldspathic phosphatic sand, and slightly dolomitic, sandy, phosphatic, fossiliferous

limestone (Ref. 42, p. 15). In the Savannah area, a thick section of green silt and clay contributes to the Hawthorn Formation's confining properties (Ref. 44, pp. 29-31). Thick sand zones and lenses of limestone within the Hawthorn produce moderately large volumes of water under artesian conditions (Refs. 43; 44, p. 30). The Hawthorn Formation is approximately 120 feet thick in the area; and even though it is used as a source for some private wells, it is an important confining unit in the Savannah area (Refs. 43; 44, p. 14). The vertical conductivity of the least permeable layers within the Hawthorn Formation has been calculated to average 1.3 x 10-3 ft/day (4.59 x 10-7 cm/sec) in Chatham County (Ref. 46, p. 28).

The underlying formations of Miocene, Oligocene, and Eocene ages are collectively termed the Floridan aquifer, also known as the Principal Artesian aquifer (Ref. 44, pp. 14, 37). In descending stratigraphic order, the geologic units which constitute the principal artesian aquifer are the Tampa Limestone, undifferentiated rocks, the Ocala Limestone, the Gosport Sand, and the Lisbon Formation. The Lisbon Formation serves as the lower confining unit in this hydrologic system (Ref. 44). Yields in the principal artesian aquifer range from 200 gpm in the Tampa Limestone to 4200 gpm in the Ocala Limestone (Ref. 44, pp. 14, 15). The transmissivity in the principal artesian aquifer ranges from 25,000 to 50,000 ft²/day in the Savannah area (Ref. 45, plate 1).

Large groundwater withdrawals from the principal artesian aquifer in Savannah have created a cone of depression that extends laterally beyond the city (Refs. 43; 47, p. 111). This cone of depression has a very steep gradient, which results in an artificially induced downward component in the movement of water within the surficial aquifer. The principal artesian aquifer influences recharge from the surficial aquifer toward the cone of depression. The interconnection, however, between the principal artesian aquifer and overlying units is very slight according to U.S. Geological Survey personnel familiar with the area (Ref. 43).

The groundwater flow direction in the principal artesian aquifer is greatly influenced by the cone of depression. The principal artesian aquifer's groundwater flow direction at the Latex property is north and west toward the center of pumping (Ref. 47, p. 111). Groundwater within the surficial aquifer is most likely to flow east toward the Wilmington River or south toward Williamson Creek (Appendix A). The water table within the surficial aquifer is located within 10 feet below land surface at the facility (Ref. 1, pp. 27, 29).

#### 3.3.2 Aquifer Use

Nearly all the residential water needs of Chatham County are provided by groundwater from deep wells drilled into the principal artesian aquifer (Ref. 48). The water needs of communities within

4 miles of Latex Construction are served either by one of five municipal water systems or by private wells. The Chatham County, Hunter Army Airfield, Thunderbolt, and Savannah water systems obtain their water from deep wells. The Savannah Industrial and Development Water System, which supplies water for industry and to the Savannah system during peak summer periods, obtains its water from Abercorn Creek. There are 14 municipal wells serving approximately 160,000 residents that lie within 3 miles of the facility (Refs. 49, 50). The nearest lies 2700 feet north of the facility (Ref. 51). Private potable water wells in Chatham County are generally cased to 300 feet and have an additional 100 feet of open hole. Shallow wells for potable water are illegal (Ref. 48). No private wells were found during a reconnaissance of the facility (Ref. 51).

#### 3.4 SUMMARY OF POTENTIALLY AFFECTED POPULATIONS AND ENVIRONMENTS

There are four pathways of concern for the facility: surface water, air, onsite pathways, and groundwater.

The surface water is the primary pathway of concern at the Latex Construction facility. The site borders extensive salt marshes and is on waterbodies that are extensively commercially and recreationally fished. A number of aquatic endangered species are also found in the waters of the site area.

The air and onsite pathways are also of concern because of the sandblasting activities at the site and the presence of uncontained potentially contaminated surface soils. Potentially affected targets within 4 miles include students, employees, and residents. The estimated population within 4 miles of the site is 80,303. There is a population of 1439 within 1 mile that is a potential target for the onsite exposure pathway. A number of terrestrial endangered species may also be found in the area.

Groundwater is of minor concern because the surficial aquifer is not used for potable water. The aquifer of concern in the Savannah area is the Floridan, which is confined by a thick, clay layer.

#### 4.0 FIELD INVESTIGATION

#### 4.1 SAMPLE COLLECTION

#### 4.1.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation were in accordance with standard operating procedures as specified in Sections 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

#### 4.1.2 **Duplicate Samples**

Duplicate samples were taken during this investigation. The offer of duplicate samples was accepted by Rudy Cherry III of Westinghouse Environmental Services, representing the property owner, and by Gary Raven of Trinity Industries, representing Trinity Marine, Inc. (Ref. 17).

#### 4.1.3 Description of Samples and Sample Locations

A total of 17 samples were collected for this inspection. Samples were taken in four potential source areas, the sandblast area, overflow sandblast area, hazardous waste storage, basin, and along likely migration pathways, in an attempt to identify and characterize contaminants that may be present in the environment as a result of activities at the facility. Samples collected consisted of 6 surface soil, 5 subsurface soil, and 6 sediment samples. Two of the sediment samples, one in Williamson Creek and one in the Wilmington River, were collected as control samples. No true background sediment samples could be collected because tidal flushing could potentially move contaminants upstream, as well as downstream. No groundwater samples were collected because of the lack of targets associated with the surficial aquifer. Sample locations are described in detail in Table 7 and are shown in Figure 4.

TABLE 7

### SAMPLE CODES, DESCRIPTION, AND RATIONALE LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

Sample Code	Description	Rationale
LC-SS-01	Background sample taken from grassy strip at north end of west storage area parking lot. Collected between 1/2 and 2 feet below land surface (bls):	To determine background surface soil conditions.
LC-SS-02	Source sample taken 3 feet south of hazardous waste storage area below drain in dike around waste oil tank. Soil slightly stained. Collected between 0 and 4 inches bls.	To determine if contaminants have been drained to ground from within diking.
LC-SS-03	Source sample taken just east of rails in sandblast area. Collected beneath loose sandblast grit at a depth of 1.5 feet bls.	To determine if contaminants are present in the sandblast area.
LC-SS-04	Source sample taken about 100 feet south of building between grit pile and sandblast area. Collected 8 inches bls.	To determine if contaminants are present in the sandblast area.
LC-SS-05	Source sample taken from large stain on west side of hazardous waste storage area. Collected 1/2 inch bls.	To determine if contaminants are present in the stain.
LC-SS-06	Source sample taken 150 feet south of basin and 120 feet east of pit. Collected 4 inches bls.	To determine if contaminants are present in this area where some sandblasting seems to have been done.
LC-SB-01	Background sample taken from same hole as LC-SS-01. Saturated soil collected 5 feet bls.	To determine background subsurface soil conditions.
LC-SB-02	Source sample taken 60 feet southeast of hazardous waste storage area. Saturated soil collected between 4 and 6 feet bls.	To determine if contaminants are present in south end of yard which may have been filled.

LC - Latex Construction

SS - Surface Soil SB - Subsurface Soil SD - Sediment

**TABLE 7** 

## SAMPLE CODES, DESCRIPTION, AND RATIONALE LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

Sample Code	Description	Rationale
LC-SB-03	Source sample taken between transfer rails in sandblast area. Saturated soil collected beneath 10 feet of sandblast sand. Sample depth is between 10 and 12 feet bls.	To determine if contaminants are present in subsurface soils in sandblast area.
LC-SB-04	Source sample taken from same hole as LC-SS-04. Saturated soil collected 6 feet bls.	To determine if contaminants are present in subsurface soils in sandblast area.
LC-SB-05	Source sample taken 3 feet from LC-SS-06. Saturated soil collected between 4 1/2 and 5 feet bls.	To determine if contaminants are present in area where some sandblasting and filling may have been done.
LC-SD-01	Control sample taken 50 feet east of Rivers End dock and 100 feet south of commercial shrimp boat docks in Wilmington River. Collected with ponar dredge in 20 feet of water at low tide.	To isolate contaminants in sediments originating on site from those originating from offsite sources.
LC-SD-02	Source sample taken from center of basin. Collected with hand auger in 16 feet of water at low tide.	To determine if contamination attributable to facility operations has entered the Wilmington River.
LC-SD-03	Downgradient sample taken from Wilmington River 75 feet south of basin and 100 feet east of the shore. Collected with ponar dredge in 8 feet of water.	To determine if contamination attributable to facility operations has entered the Wilmington River.
LC-SD-04	Control sample taken in Williamson Creek at first island south of facility. Collected with hand auger in 7 feet of water during incoming tide.	To isolate contaminants originating on site from those originating off site.

LC - Latex Construction

SS - Surface Soil SB - Subsurface Soil

SD - Sediment

**TABLE 7** 

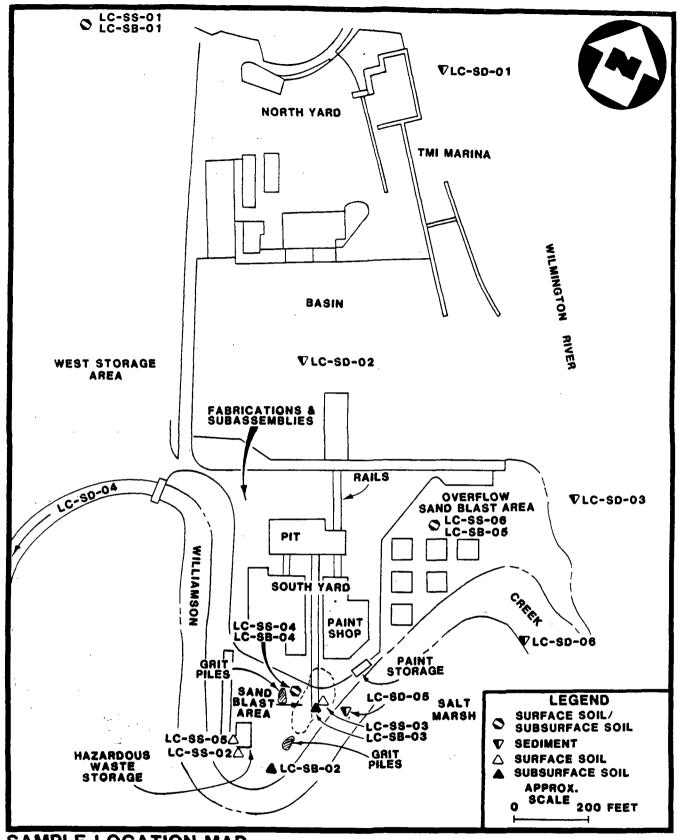
### SAMPLE CODES, DESCRIPTION, AND RATIONALE LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

Sample Code	Description	Rationale
LC-SD-05	Source sample taken in Williamson Creek 10 feet from shore adjacent to sandblast area near an outfall pipe. Collected with hand auger in 4 1/2 feet of water during incoming tide. Sandblast grit was found on top of sediments in the marsh.	To determine if contaminants attributable to facility had entered Williamson Creek.
LC-SD-06	Downgradient sample taken 100 feet north of mouth of Williamson Creek near south bank in about 6 feet of water.	To determine if contaminants attributable to facility had entered Williamson Creek.

LC - Latex Construction

SS - Surface Soil SB - Subsurface Soil

SD - Sediment



SAMPLE LOCATION MAP LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

FIGURE 4



#### 4.2 SAMPLE ANALYSIS

#### 4.2.1 <u>Analytical Support and Methodology</u>

All samples collected were analyzed under the Contract Laboratory Program (CLP) and analyzed for all parameters listed in the Target Compound List (TCL). Organic analysis of soil samples was performed by CompuChem Laboratories, Research Triangle Park, North Carolina. Inorganic analysis of soil samples was performed by DataChem, Salt Lake City, Utah. Special analytical services were performed by Environmental Science & Engineering, Gainesville, Florida.

All laboratory analyses and laboratory quality assurance procedures used during this investigation were in accordance with standard procedures and protocols as specified in the <u>Analytical Support Branch Operations and Quality Assurance Manual</u>, United States Environmental Protection Agency, Region IV, Environmental Services Division, revised June 1, 1985; or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

#### 4.2.2 Analytical Data Quality

All analytical data were subjected to a quality assurance review as described in the EPA, Environmental Services Division laboratory data guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been flagged with a "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are flagged with an "N" indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as positive identification to its presence. The complete analytical data sheets are presented in Appendix B.

#### 4.2.3 Presentation of Analytical Results

Throughout the following discussion of analytical results, the concentrations of some of the contaminants detected have been described as "significant." This means that the concentration was either three times that found in the background/control sample, or it was 3 times the minimum quantitation limit (MQL).

Special analytical services were requested for monobutyl tin, dibutyl tin, tributyl tin, monophenyl tin, diphenyl tin, triphenyl tin, and total tin because of the use of organotin compounds as antifouling

agents in marine coatings. No phenyl tins were detected. All organotin compounds were confirmed by gas chromatography/mass spectrometry. This analysis was done on all samples except LC-SS-05.

#### 4.2.3.1 Sandblast Area

Four soil samples were collected in the sandblast area, and sediment samples were collected in Williamson Creek adjacent to and downstream of the sandblast area. Significant concentrations of a variety of polyaromatic hydrocarbons (PAHs), typical indicators of petroleum and oil products; metals; and organotin compounds were detected in the sandblast area.

Phenanthrene (4 times MQL) and fluoranthene (4.8 times MQL) were found in the surface soil sample collected west of the transfer rails (LC-SS-04). Ethyl benzene (3 times MQL), xylenes (4 times MQL), phenanthrene (4 times MQL), fluoranthene (7.8 times MQL), and pyrene (6 times MQL) were found in the subsurface soil sample between the transfer rails (LC-SB-03). The PAHs detected could be from the draining of bilges in the sandblast area or from fuel spills. Three miscellaneous polynuclear aromatics (PNAs) and one organic solvent were also tentatively identified at estimated concentrations ranging from 200 to 4000 ug/kg in surface soil samples. Tentative identifications and estimated concentrations were also made for two PNAs and 15 other purgeable compounds in subsurface soil samples. Organic analytical results are summarized in Table 8.

Surface soil samples from the sandblast area contained only one metallic contaminant of note. Zinc was found at concentrations of 7 times background. In contrast to this, subsurface soil samples contained numerous metals at elevated levels. The subsurface soil sample collected adjacent to the rails contained 10 metals, including cadmium, chromium, copper, vanadium, and zinc, ranging from 3 to 12 times the MQL or background level. The sample collected from between the rails contained 15 metals, including arsenic, barium, cadmium, chromium, copper, lead, vanadium, and zinc, ranging from 4 to 115 times background or MQL levels. Most of the metals found could come from more than one source or activity on the property. Marine coatings may contain a variety of trace metals. Red lead and zinc chromate are used as anticorrosives; cuprous oxide, as well as organotin compounds are used as antifoulants, and almost all the metals detected on site are used as paint pigments. Copper, chrome, and arsenic are also commonly used as wood preservatives. Heavy metals also occur in silicon dioxide abrasives such as volcanic ash, sand, etc., which are used in sandblasting. Sandblasting itself releases steel alloys such as beryllium, vanadium, cadmium, and nickel in particulate form. Trace amounts of lead, chromium, arsenic, zinc, magnesium, and other metals also occur in fuel oils and other petroleum products. Inorganic analytical results are summarized in Table 9.

**TABLE 8** 

### SUMMARY OF ORGANIC ANALYTICAL RESULTS SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background LC-SS-01	Haz. Waste Storage (HWS) LC-SS-02	Sandbla	ast Area LC-SS-04	Stain Near HWS LC-SS-05	Overflow Sandblast Area LC-SS-06	Background	South End of Yard Near HWS LC-SB-02	Sandbla	ist Area LC-SB-04	Overflow Sandblast Area LC-SB-05
PURGEABLE COMPOUNDS	203301	10 00 01	20 00	20 33 01	2000	20 33 33			1 2 3 2		
CHLOROFORM	-	5,1	41	6J	1 J	ر 2	5,1	91	ر 4		2 يا
TOLUTNE	-	7	-	33	11	ر 2	-	31	71	·	-
ETHING BENZETIE	-	-	-		,		-	·	21	-	-
TOTAL XYLENES			-	-	2)	-	-	-	28	·	
EXTRACTABLE COMPOUNDS											
NAPHTHALENE	-	-	-	1001	-	-	-	-	-	:	
2-METHYLNAPHTHALENE	-	-	-	-	21,000J	-	-	-		-	<del>-</del>
ACENAPHTHENE	-	-	-	170)		·	-	-	3001	-	<u>-</u>
DIBENZOFURAN	<u> </u>	-		84)		-	-	-			-
FLUORENE	-	-	-	ر 150	19,0001	-	_	-	-	-	-
PHENANTHRENE	-	-		1600	38,000	-	_	-	1600	-	-
ANTHRACEME	-	-	-	360)		391		-	250J	-	-
FLUORANTHENE	-	180J	110J	1800	-	3401	<u>-</u>	-	2900	51J	47)
PYRENE	-	ر170		1300)		250)	-	ر89	2400	ر60	-

- Material analyzed for but not detected above minimum quantitation limit

J Estimated value

N Presumptive evidence of presence of material

#### TABLE 8

### SUMMARY OF ORGANIC ANALYTICAL RESULTS SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

PARAMETERS (ug/kg)	Background	Haz Waste Storage (HWS)		ast Area	Stain Near HWS	Overflow Sandblast Area	Background	South End of Yard Near HWS	Sandbla		Overflow Sandblast Area
BENZO(A)ANTHRACENE	LC-SS-01	ل <b>C-SS-02</b> 100	51J	<b>LC-SS-04</b> 800	LC-SS-05	LC-SS-06 130J	LC-SB-01	LC-SB-02	<b>LC-SB-03</b> 930	LC-SB-04	LC-SB-05
CHRYSENE	<u> </u>	1403	59)	750		1701		-	1200		<u>-</u>
BENZO(BIAND/ORIK)FILUORAMTHENE		210J	-	1000J	-	1301	-	-	680J	-	-
BENZO-4-PYREM	-	100J	43J	630		1401			1000		
INDENO (1,2,3-CD) PRREME	-	. ل53	-	3001	·	· 78J			3801		-
DIBENZO(A,H)AM1HRACEME	-	-	-	-				· · · · · · · ·	ر150	-	-
BENZO(GHI)PERTLEME	-	59J	-	320J		ر84		-	460J	-	
OXYBISETHANOL DIACETATE	-	<u>.</u>	-	-	-		500JN	-	-	-	-
ETHANEDIOL MONOACETATE	-			4000JN		-	4000JN	-		-	-
DIMETHYCMAPHTHACENE	-	-	-	-	100,000JN	<u>-</u> ·	-	-	1000JN	-	-
TRIMETHYLNAPHTHALENE	-	-		-	200,000JN		-	-	3000N		-
CHLOROTRIS(METHYLPROPYL)\$1ANNANE	-	800JN				3001M	-		20,000JN	-	-
BENZENEACETIC ACID	200JN		-	-		-	-		-	-	<u>-</u>
ETHYLIDENEBIS(ETHYLBENZENE)	-	200JN	-	-		-			-	-	-
BEMZOPYREGE(NOT A)	-	3001N		-		400JN	2	-	-	-	-

Material analyzed for but not detected above minimum quantitation limit

J Estimated value

N Presumptive evidence of presence of material

**TABLE 8** 

### SUMMARY OF ORGANIC ANALYTICAL RESULTS SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Background	Haz. Waste Storage (HWS)	Sandbla	ast Area	Stain Near HWS	Overflow Sandblast Area	Background	South End of Yard Near HWS	Sandbla	st Area	Overflow Sandblast Area
PARAMETERS (ug/kg)	LC-SS-01	LC-SS-02	LC-\$\$-03	LC-55-04	LC-SS-05	LC-SS-06	LC-SB-01	LC-SB-02	LC-SB-03	LC-SB-04	LC-SB-05
TRIBROMOPHENOL	-	-	-	3001M		-			-	•	-
CYCLOPENTAFHONANTHRENE	-	-		200JN		-				-	-
BENZOFLŲ ORENI:	-	-	-	300JN/2		-			·		-
BENZOFI ((ORANTHENE (NOT BIOR K)		-	-	400JN		-		-	-	-	-
РЕСКОЈЈЕ ОТА НВОЈОЈО	-		-		r1	-	-	-	-	-	-
UNIDENTIFIED COMPOUNDS-NO.	5000/5	2000J/4	-	۱ /ر600	5,000,000J/17	5000J/8	50007/2		30,0001/15	8001/2	1000J/2
PESTICIDE\PCB COMPOUNDS											·
4,41-DDE (P,P1-DDE)	37	-			-	-	-	-	·	-	-
GAMMA-CHLORDANE //2	-	-	-		930		*	-	-	-	-
PCB-1248 (AROCLOR 1248)		-	-		- 1	-	-	-	280	-	

- Material analyzed for but not detected above minimum quantitation limit

J Estimated value

N Presumptive evidence of presence of material

TABLE 9

## SUMMARY OF INORGANIC ANALYTICAL RESULTS SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

4	Background	Haz. Waste Storage	Sandbla	st Area	Stain	Overflow Sandblast Area	Background	South End of Yard	Sandbla	st Area	Overflow Sandblast Area
PARAMETERS (mg/kg)	LC-SS-01	LC-SS-02	LC-SS-03	LC-SS-04	LC-SS-05	LC-SS-06	LC-SB-01	LC-SB-02	LC-5B-03	LC-SB-04	LC-SB-05
ALUMINUM	5800	7700	3100	1700	7600	8000	5300	33,000	20,000	11,000	8200
ARSENIC	-	3.11	-	-	ر3	3.51		-	8.81	-	.14J
BARIUM	26	58	-	-	100	130	10 '	37	64	17	14
BERYLLIUM	-		-	-	2.8	2.9	-	-	-		
CADMIUM	-	-	-	-	14	13	-	-	5.8	2.7	2.6
CALCIUM	ر1700	3700J	ر450	· 3700J	86001	ر6800	880J	ر27,000	4900J	3700J	9700J
CHROMIUM	-	331	2.43	5.2J	97)	91J	5)	49J	39J	18J	131
COBALT		8.5	-	-	30	19	-	11	11	5.8	
COPPER	-	150	-	-	1700	1300			460	48	-
IRON	2800J	12,000)	760J	2700J	36,0001	33,0001	910J	22,0001	24,0001	9500J	ر6400
LEAD	22	190	14	18	1500	770	-	13	95	14	17
MAGNESIUM	280	850	-	240	1300	1100	140	8300	2400	1500	960
MANGANESE	74J	88J	11J	24J	560)	ر 270	16J	220J	180J	831	801
MERCURY	-	. 0.13			1.2	1		-		-	0.18
NICKEL	-		-		230	190	-	-		-	†
POTASSIUM	150	790	• .	210	990	1000		2300	1900	1000	440

Material analyzed for but not detected above minimum quantitation limit

Estimated value

TABLE 9

## SUMMARY OF INORGANIC ANALYTICAL RESULTS SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

· ·	Background	Haz. Waste Storage	Sandbla	st Area	Stain	Overflow Sandblast Area	Background	South End of Yard	Sandbla	st Area	Overflow Sandblast Area
PARAMETERS (mg/kg)	LC-SS-01	LC-SS-02	LC-SS-03	LC-55-04	LC-SS-05	LC-55-06	LC-SB-01	LC-SB-02	LC-SB-03	LC-5B-04	LC-SB-05
sodium .	-	, -	-	-	510	490		830	2200	410	350
VANADIUM	-	12	3.8		16	18	4.5	· 63	40	26	19
ZINC	14	410	25	110	2600	2140	7	56	630	58	21

Material analyzed for but not detected above minimum quantitation limit

Estimated value

1

The highest concentrations of organotin compounds on the property were found in the sandblast area near the rails. However, other samples taken in the sandblast area farther away from the rails contained no significant organotin levels. The surface soil sample contained dibutyl tin (7 times estimated MQL) and tributyl tin (15 times estimated MQL). The subsurface soil sample was collected between the rails and contained monobutyl tin (3.8 times estimated MQL), dibutyl tin (37 times MQL), and tributyl tin (38 times MQL). Levels of total tin were 6 times above the estimated MQL in the subsurface soil sample in the sandblast area. Another organotin, chlorotris(methylpropyl)stannane, was tentatively identified at an estimated concentration of 20,000 ug/kg in the subsurface soil sample taken between the rails. This compound is representative of the intermediates used in the preparation of commercially important organotins (Ref. 19, p. 61). Inorganic tin is the final degradation product of organotin compounds. The results from the special analytical services are summarized in Table 10.

Sediment samples were collected in Williamson Creek. The sample adjacent to the sandblast area was collected at an outfall pipe. It is unknown where on the property this pipe originates, as neither it nor a nearby storm drain appears on the blueprint of the facility (Ref. 29). No organic compounds were detected at significant concentrations in either this sample or in the downgradient sample. Organic analytical results for sediments are summarized in Table 11.

Six metals were found at significant concentrations in sediment from Williamson Creek adjacent to the sandblast area. The metals of concern are barium (4 times control), cadmium (17 times control), copper (65 times control), lead (51 times control), nickel (185 times MQL), and zinc (15 times control). Significant levels of cadmium (13 times MQL), copper (4.6 times MQL), and lead (4 times control) were found at the creek mouth. This indicates that these metals may be migrating from their point of deposition to the Wilmington River. Inorganic analytical results for sediments are presented in Table 12.

Dibutyl tin (8 times MQL) and tributyl tin (7 times MQL) were found at significant levels in the sediments adjacent to the sandblast area. Total tin was found at 8 times (estimated) the MQL in this area. Chlorotris(methylpropyl)stannane was also tentatively identified in this sample. However, the downgradient sample contained no detectable levels of tin or tin compounds. The results for sediments from special analytical services are summarized in Table 13.

TABLE 10

### **SUMMARY OF SPECIAL ANALYTICAL SERVICES** SURFACE AND SUBSURFACE SOIL SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Background	Haz. Waste Storage (HWS)	Sandbla	st Area	Stain Near HWS	Overflow Sandblast Area	Background	South End of Yard Near HWS	Sandblas	it Area	Overflow Sandblast Area
PARAMETERS	LC-SS-01	LC-5S-02	LC-55-03	LC-\$\$-04	LC-55-05	LC-SS-06	LC-SB-01	LC-SB-02	LC-SB-03	LC-SB-04	LC-SB-05
MONOBUTYL TIN (ug/kg)		99JC	44JC		NA	32JC		-	93JC ·	•	
DIBUTYL TIN (ug/kg)	-	310C	170C	33N	NA	81C	<u> </u>	-	930C	-	-
TRIBUTYL TIN (ug/kg)	-	410JC	370C	35N	NA	93C	-	35N	970C	31N	40N
TIN (mg/kg)	-	117	-	-	NA	180J	-	- '	35.	191	•

Material analyzed for but not detected above minimum quantitation limit

Estimated value

Presumptive evidence of presence of material Confirmed by GCMS

Not analyzed

TABLE 11

## SUMMARY OF ORGANIC ANALYTICAL RESULTS SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Control Wilmington River	Center of Basin	Downgradient Wilmington River	Control Williamson Creek	Creek Near Paint Shop	Mouth of Williamson. Creek
PARAMETERS (ug/kg)	LC-SD-01	LC-SD-02	LC-SD-03	LC-SD-04	LC-SD-05	LC-SD-06
PURGEABLE COMPOUNDS						·
CHLOROFORM	-		41	ر 2	-	-
EXTRACTABLE COMPOUNDS						
FLUORANTHENE	180J	-	-	-	3801	-
PYRENE	210J		-	-	-	-
BENZO(A)ANTHRACENE	110J	-	-	· -	-	-
CHRYSENE	110J	-	-	-	190J	74)
BENZO(B AND/OR K)FLUORANTHENE	140)			-	1307	220J
BENZO-A-PYRENE	-	-		-	150J	87J
ETHANEDIOL MONOACETATE	-	,	3000N	-	-	-
CHLOROTRIS(METHYLPROPYL)STANNANE	-		-	-	1000JN	-
UNIDENTIFIED COMPOUNDS/NO.	- 3000J/2			-	700J/1	2000J/2

- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material

TABLE 12

### SUMMARY OF INORGANIC ANALYTICAL RESULTS SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Control River	Center of Basin	Downgradient River	Control Creek	Creek Near Paint Shop	Creek Mouth
PARAMETERS (mg/kg)	LC-SD-01	LC-SD-02	LC-SD-03	LC-SD-04	LC-SD-05	LC-SD-06
ALUMINUM	10,000	52,000	2200	23,000	26,000	23,000
ARSENIC	3.91	19.		5.5J	7.9J	-
BARIUM	13	-	-	28	· 100	23
BERYLLIUM	-	-	-	÷.	2.5	
CADMIUM	-	14	-	<u>-</u>	17	13
CALCIUM	(6400	3400J	7000J	10,000	3400J	9400)
CHROMIUM	19J	78J	4 6)	. 331	54J	30) -
COBALT	-	21	-	8.9	14	13
COPPER	-	34		6.3	410	29
IRON	10,000	41,000J	2200)	19,000J	27,000)	19,0001
LEAD	10	34	3.9	9.9	510	44
MAGNESIUM	1900	8600	590	4800	3700	3800
MANGANESE	76J	310)	221	160J	170)	ر 93
NICKEL	-	-			74	-
POTASSIUM	750	4200	240	2300	3600	3100
SODIUM	4300	22,000	2000	4600	12,000	13,000
VANADIUM .	27	110	8.6	45	56	50
ZINC	32	97		60	940	55

<sup>-</sup> Material analyzed for but not detected above minimum quantitation limit

J Estimated value

#### TABLE 13

## SUMMARY OF SPECIAL ANALYTICAL SERVICES SEDIMENT SAMPLES LATEX CONSTRUCTION THUNDERBOLT, CHATHAM COUNTY, GEORGIA

	Control River	Center of Basin	Downgradient River	Control Creek	Creek Near Paint Shop	Creek Mouth
PARAMETERS	LC-SD-01	LC-SD-02	LC-SD-03	LC-5D-04	LC-SD-05	LC-SD-06
DiBUTYL TIN (ug/kg)	-				270C	
TRIBUTYL TIN (ug/kg)	32N	-			620C	
TIN (mg/kg)	-	-		-	90 j	-

- Material analyzed for but not detected above minimum quantitation limit
- J Estimated value
- N Presumptive evidence of presence of material
- C Confirmed by GCMS

#### 4.2.3.2 Overflow Sandblast Area

A surface and a subsurface soil sample were collected in the overflow sandblast area. No significant concentrations of organic contaminants were found in the samples. Organic analytical results are presented in Table 8.

Fifteen metals were detected in the surface soil sample at concentrations ranging from 3 to 185 times background or MCL. The metals of concern are arsenic (3.5 times MQL, estimated), barium (5 times background), beryllium (6 times MQL), cadmium (19 times MQL), chromium (45 times estimated MQL), cobalt (7 times MQL), copper (185 times MQL), lead (35 times background), nickel (42 times MQL), and zinc (152 times background). Nine metals were detected in the subsurface soil sample at concentrations ranging from 3 to 26 times background or MCL. The metals of concern are arsenic (26 times MQL, estimated), cadmium (3 times MQL), vanadium (4 times background), and zinc (3 times background). Inorganic analytical results are presented in Table 9.

Dibutyl tin (3 times estimated MQL) and tributyl tin (4 times estimated MQL) were found in surface soils. Chlorotris(methylpropyl)stannane was also tentatively identified in this sample. Total tin was found at 42 times the MQL in the surface soil sample. No significant levels of tin or organotin compounds were found in the subsurface soil sample. The results from the special analytical services are summarized in Table 10.

#### 4.2.3.3 Hazardous Waste Storage

Two surface soil and a subsurface soil sample were collected near the hazardous waste storage area. One surface soil sample was collected from a stain adjacent to the area, and one was collected below a drain in the diking surrounding the area. The subsurface soil sample was collected at a distance southeast of the storage area because of difficulty advancing the bore hole through subsurface debris adjacent to the storage area. The stain contained high concentrations of three PAHs, 2-methylnaphthalene (estimated at 56 times MQL), fluorene (estimated at 51 times MQL), and phenanthrene (102 times MQL). Gamma-chlordane was detected in the stain at 10 times the MQL. An additional 17 unidentified extractable compounds were found at an estimated concentration of 5,000,000 ug/kg. No significant levels of organic contaminants were found in the other two samples. The stain and resulting contamination are likely the result of poor housekeeping practices in the hazardous waste storage area. The organic analytical results are summarized in Table 8.

The surface soil sample collected below the drain contained nine metals at levels significantly above background. The metals of concern are arsenic (estimated 3 times MQL), chromium (estimated

15 times estimated MQL), cobalt (3 times MQL), copper (21 times MQL), lead (8 times background), and zinc (29 times background). Sixteen metals were detected at significant levels in the stain, with concentrations ranging between 4 and 185 times background. The majority of metals found in the stain can be related to waste oils. The subsurface soil sample contained elevated levels of 10 metals. The metals of concern in this sample are barium (3.7 times background), chromium (estimated 10 times background), vanadium (14 times background), and zinc (8 times background). Inorganic results are summarized in Table 9.

The only significant levels of organotins in the hazardous waste storage area were found below the drain. Mono- (4 times MQL), di- (12 times MQL), and tributyl (16 times estimated MQL) tins were found. Chlorotris(methylpropyl)stannane was also tentatively identified in this sample. Total tin was not found at significant levels. The results from special analytical services are summarized in Table 10.

#### 4.2.3.4 Basin

A sample was collected in the basin and another was collected downstream. No significant concentrations of organic or organic compounds were found in either sample. The organic results and the results from specified analytical services are summarized in Tables 11 and 13.

Thirteen metals were found at significant levels in the center of the basin, and the concentrations ranged from 3 to 13 times the control. The metals of concern are arsenic (5 times control, estimated), cadmium (14 times MQL), chromium (4 times control, estimated), cobalt (5 times MQL), lead (3 times control), vanadium (4 times control), and zinc (3 times control). No significant levels of metals were found in the downgradient sample. It is possible that the contaminants in the basin have originated from the TMI marina. Inorganic analytical results are presented in Table 12.

#### 5.0 SUMMARY

The field inspection of Latex Construction consisted of the collection of 17 environmental samples of sediment, surface, and subsurface soil. These samples were taken from four potential source areas and along likely migration pathways. Analytical results indicated the presence of a variety of organic and inorganic contaminants at the facility. Contamination was found in each of the source areas and in both surface and subsurface soil samples. Contamination from the sandblast area also appears to be entering Williamson Creek and the salt marsh along its banks.

Pathways of concern at the ship yard are surface water, air, onsite, and groundwater pathways. The surface water pathway is of concern because contamination was found in sediments of Williamson Creek. The surface waters and marshes provide habitats for a number of threatened and endangered species and also support a large amount of commercial and recreational fishing.

The air and onsite pathways are of concern because of contaminated surface soils onsite and because sandblasting continues to release potentially contaminated particulates. The facility is not only located in a residential area, it is also adjacent to a sensitive environment. Although the facility is fenced, restricting access from the land, the area is in an active boating community and access from the water is unhindered.

Almost all of Chatham County relies on groundwater as a source of drinking water. However, all wells in the area draw from below a thick confining layer, and the groundwater pathway is therefore of minor concern.

Based upon the field inspection, FIT 4 recommends that a Listing Site Inspection, Phase I, be conducted.

#### **REFERENCES**

- 1. McLaren Environmental Engineering, "Property Transaction Environmental Assessment and Verification Sampling, Lockheed Shipbuilding, Savannah Division," September 7, 1988.
- 2. Potential Hazardous Waste Site Preliminary Assessment (EPA Form 2070-12) and attachments for Latex Construction Company. Filed by Gilda A. Knowles, Environmental Division, February 19,1986.
- 3. Leon White, Head of Safety and Security, Thunderbolt Shipbuilding, and Dave Moore, Former Head of Safety and Security, Latex Construction, telephone conversation with Geoffrey Carton, NUS Corporation, December 14, 1988. Subject: History of Latex Construction.
- Wane Varner, Thunderbolt Marine, Inc., telephone conversation with Geoffrey Carton, NUS Corporation, December 14, 1988. Subject: Dredging at Latex Construction.
- 5. Trip Report, Lockheed Shipbuilding, Thunderbolt Shipbuilding, April 2, 1990; filed by Freddie L. Dunn, Jr., Georgia Department of Natural Resources, May 14, 1990.
- 6. Richard Reddy, Friends of the Wilmington River, letter to Leonard Ledbetter, Director, Georgia Department of Natural Resources, February 22, 1983. Subject: Sampling in Williamson Creek.
- 7. Richard Reddy, Friends of the Wilmington River, letter to Col. Charles Dominy, District Engineer, U.S. Army Corps of Engineers, March 30, 1983. Subject: Response to W.T. Moore's letter of March 25, 1983.
- 8. W.T. Moore, Sparkman, Harris & Moore Attorneys at Law, letter to Col. Charles Dominy, District Engineer, U.S. Army Corps of Engineers, March 25, 1983. Subject: Latex Construction application #074 OYN 004452.
- 9. UGA Marine Extension Service, "Sediment Sampling of Williamson Creek and the Wilmington River," undated.
- 10. Wane Varner, Thunderbolt Marine, Inc., telephone conversation with Geoffrey Carton, NUS Corporation, January 13, 1989. Subject: Sampling at Latex Construction.

- 11. McLaren Environmental Engineering, "Property Transaction: Excavation and Verification Sampling, Lockheed Shipbuilding, Savannah Division," February 16, 1989.
- 12. Steve Carlton, McLaren Environmental Engineering, telephone conversation with Geoffrey Carton, NUS Corporation, February 1, 1990. Subject: Questions about sample numbers in their report.
- 13. U.S. Environmental Protection Agency, Facility Indexing System (FINDS), printout for Latex Construction and Lockheed Shipbuilding, August 17, 1989.
- 14. National Archives and Records Administration, Code of Federal Regulations, Protection of the Environment 40: Parts 190 to 399, Revised July 1, 1987 (Washington, D.C.: GPO, 1987), p. 377.
- 15. Sue Matzuras, Georgia Environmental Protection Division, telephone conversation with Geoffrey Carton, NUS Corporation, February 2, 1990. Subject: RCRA status of Lockheed Shipbuilding.
- Leon White, Thunderbolt Shipbuilding and Repair, telephone conversation with Geoffrey Carton, NUS Corporation, March 27, 1990. Subject: EPA ID numbers and sandblast grit currently used.
- 17. NUS Corporation Field Logbook No. F4-1610 for Latex Construction, TDD No. F4-8809-07. Documentation of site inspection, September 8 12, 1989.
- 18. R.W. Drisko, "Coatings, Marine," <u>Kirk-Othmer Encyclopedia of Chemical Technology</u>, 3rd ed., Vol. 6 (New York: John Wiley & Sons, 1983), pp. 445-452.
- 19. Melvin Gitlitz and Marguerite Moran, "Tin Compounds," <u>Kirk-Othmer Encyclopedia of Chemical Technology</u>, 3rd ed., Vol. 23 (New York: John Wiley & Sons, 1983), pp. 52 72.
- C.D. Klaassen, M.O. Amdur, and J. Doull, "Tin," <u>Toxicology: The Basic Science of Poisons</u>,
   3rd ed., (New York: Macmillan Publishing Company, 1986), pp. 626-627.
- 21. "News and Analysis: Washington," HAZMAT World (April 1990), p. 12.

- 22. Dr. Herb Windom, Professor of Oceanography, Skidaway Institute of Oceanography, telephone conversation with Geoffrey Carton, NUS Corporation, October 31, 1988. Subject: Likely fate of heavy metals released into surface water in Thunderbolt area.
- 23. 'G. Carton, NUS Standard Calculation Sheet for Latex Construction, April 4, 1990. Subject: Estimate of volume of sandblast grit at facility.
- 24. Reed Minerals, A Division of Harsco Corporation, Advertising Circular for "Black Beauty, Coal Slag Abrasive Material," August 1989.
- 25. Reed Minerals, A Division of Harsco Corporation, Material Safety Data Sheet for Black Beauty Abrasives, 2nd revision, September 1, 1989.
- 26. Commercial Testing & Engineering Company, Report of Heavy Metal Analysis for Black Beauty, June 6, 1986.
- 27. Commercial Testing & Engineering Company, Report of Mineral Analysis for Black Beauty, June 6, 1986.
- 28. Savannah Laboratories and Environmental Services, Inc., "Report of Analysis, Composite of Sandblasting Waste," April 7, 1983.
- 29. Thomas & Hutton Engineering, "Master Plan, Thunderbolt Marine Industries," October 7, 1975 (revised February 7, 1979), scale 1:50.
- 30. Pat Howard, Thunderbolt City Hall, telephone conversation with Geoffrey Carton, NUS Corporation, March 26, 1990. Subject: Population of Thunderbolt.
- 31. USEPA, <u>Graphical Exposure Modeling System (GEMS) Data Base</u>, Compiled from U.S. Bureau of the Census data (1980).
- 32. Mrs. Michael, Chatham County Public Schools, telephone conversation with Geoffrey Carton, NUS Corporation, April 6, 1990. Subject: Thunderbolt Elementary School students.
- 33. Receptionist, Admissions Office, Savannah State College, telephone conversation with Geoffrey Carton, NUS Corporation, April 6, 1990. Subject: Students and staff at college.

- 34. U.S. Department of Commerce, <u>Climatic Atlas of the United States</u> (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.
- 35. U.S. Department of Commerce, <u>Rainfall Frequency Atlas of the United States</u>, Technical Paper No. 40 (Washington, D.C.: GPO, 1961).
- 36. Dennis Schmidt, Fisheries Biologist, Georgia Department of Natural Resources, telephone conversation with Geoffrey Carton, NUS Corporation, November 21, 1988. Subject: Fishing in the Savannah area.
- 37. Nelson Johnson, National National Marine Fisheries Service, U.S. Department of Commerce, letter to Bob Donahue (sic), NUS Corporation, February 10, 1989. Subject: Transmittal of preliminary fish landings data.
- 38. Gordon Rogers, Georgia Department of Natural Resources, telephone conversation with Geoffrey Carton, NUS Corporation, December 21, 1988. Subject: Commercial fishing on the Wilmington River.
- 39. U.S. Fish and Wildlife Service, Atlantic Coast Ecological Inventory Maps of Georgia (1980):
  Brunswick, Savannah, scale 1:250,000.
- 40. Chuck Rabolli, Georgia Natural Heritage Inventory, telephone conversation with Geoffrey Carton, NUS Corporation, November 21, 1988. Subject: Endangered species in the Savannah area.
- 41. U.S. Fish and Wildlife Service, <u>Endangered and Threatened Species of the Southeastern United States</u>, (Atlanta, Georgia, 1988).
- 42. Richard E. Krause, Sharon Matthews, and Harold Gill, "Evaluation of Ground-water Resources of Coastal Georgia; Preliminary Report on the Data Available as of July 1983," Information Circular 62 (Atlanta: Georgia Department of Natural Resources, 1984), pp. 14-15, plate 7.
- 43. Robert B. Randolph, Hydrologist, U.S. Geological Survey, Doraville, Georgia, telephone conversation with John Jenkins, NUS Corporation, April 8, 1988. Subject: Hawthorn Formation.

- 44. Harlan B. Counts and Ellis Donsky, "Salt-Water Encroachment Geology and Ground-Water Resources of Savannah Area Georgia and South Carolina," Geological Survey Water-Supply Paper 1611 (Washington, D.C.: GPO, 1963), pp. 14-37.
- 45. Robert B. Randolph and Richard Krause, "Analysis of the effects of Proposed Pumping from the Principal Artesian Aquifer, Savannah, Georgia, Area," Water-Resources Investigations Report 84-4064 (Doraville, Georgia: U.S. Geological Survey, 1984), pp. 4, 22-24, plate 1.
- 46. Richard E. Krause and Robert B. Randolph, "Hydrology of the Floridan Aquifer system in Southeast Georgia and Adjacent Parts of Florida and South Carolina," U. S. Geological Survey Professional Paper 1403-D (Washington, DC: U.S. Geological Survey, 1989), p.28.
- 47. J. S. Clarke, et al., "Ground-Water Data for Georgia, 1986," Open-File Report 87-376 (Doraville, Georgia: U.S. Geological Survey, 1987), pp. 28, 111.
- 48. Dennis Lowe, Lowe's Well Drilling, telephone conversation with Geoffrey Carton, NUS Corporation, October 18, 1988. Subject: Potable wells in Chatham County.
- 49. NUS Corporation Field Logbook No. F4-1056 for Hercules Disposal, TDD No. F4-8809-05. Documentation of facility reconnaissance, September 28 and October 26, 1988.
- 50. Federal Reporting Data System (FERDS) Report for the state of Georgia, Community and noncommunity water systems; printout obtained from EPA Region 4 Drinking Water Office (Atlanta: November 1, 1988).
- 51. NUS Corporation Field Logbook No. F4-1058 for Latex Construction Co., TDD No. F4-8809-07. Documentation of facility reconnaissance, September 29, 1988.

### U.S. EPA REGION IV

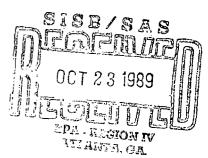
# SDMS

### Unscannable Material Target Sheet

DocID: 10	724658	Site ID: GAD980803696	<u> </u>				
Site Name:_	LATEX CONSTRUCTIO	N CO.					
Nature of M	aterial:						
Map:	X	Computer Disks:					
Photos:		CD-ROM:					
Blueprints:		Oversized Report:					
Slides:		Log Book:					
Other (descr	ibe):TOPOGRAPI	HIC MAP					
Amount of n	naterial:						
* Please contact the appropriate Records Center to view the material *							

### *UNITED STATES ENVIRONMENTAL PROTECTION AGENCY*

REGION IV COLLEGE STATION RD. ATHENS, GA. 30613



\*\*\*\*MEMORANDUM\*\*\*\*

DATE: 10/13/89

SUBJECT: Results of Purgeable Organic Analysis;

89-537 LATEX CONSTRUCTION

SAVANNAH GA

CASE NO: 12698SAS NO: 4921D

FROM: Robert W. Knight

Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

**ATTACHMENT** 

DURGEAR	E ORGANICS DATA REPORT	ESD, ATHENS, GA.	10/12/59
*** * * ** PRO ** SOU	USECT NO. 89-537 SAMPLE NO. 39768 SAMPLE TYPE: SOIL ROE: LATEX CONSTRUCTION TION ID: SS-01	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1245 STOP	** **
** ** CAS	E NO.: 12698	D. NO.: N367  * * * * * * * * * * * * * * * * * * *	**
11UJ 11U 11U 11U 20U 11UJ 11UJ 6U 6U 6U 6U 6U 6UJ 11U 6U	BROMOMETHANE VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE (TOTAL) CHLOROFORM 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE CHLOROFORM 1,1-TRICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CARBON TETRACHLORIDE VINYL ACETATE	6U 1.2-DICHLOROPROPANE 6U CIS-1.3-DICHLOROPROPENE 6U TRICHLOROETHENE(TRICHLOROETHYLENE 6UJ DIBROMOCHLOROMETHANE 6U 1.1.2-TRICHLOROETHANE 6U BENZENE 6U TRANS-1.3-DICHLOROPROPENE 6U BROMOFORM 11U METHYL ISOBUTYL KETONE 11U METHYL BUTYL KETONE 6U TETRACHLOROETHENE(TETRACHLOROETHY 6U 1.1.2.2-TETRACHLOROETHANE 6U TOLUENE 6U CHLOROBENZENE 6U ETHYL BENZENE 6U STYRENE 6U TOTAL XYLENES 12 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

DHD	SEABLE ORGANICS DATA REPORT	V ESU, ATHENS, GA.	10/12/89
	PROJECT NO. 89-537 SAMPLE NO. 39769 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SB-01		** +*
**	CASE NO.: 12698 SAS NO.: 4921D SAS N	D. NO.: N368 * * * * * * * * * * * * * * * * * * *	* * * * * * * * * ***
	13UJ CHLOROMETHANE 13U BROMOMETHANE 13U VINYL CHLORIDE 13U VINYL CHLORIDE 13U CHLOROETHANE 3OU METHYLENE CHLORIDE 13UJ ACETONE 7U CARBON DISULFIDE 7U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 7U 1,2-DICHLOROETHANE 7U 1,2-DICHLOROETHENE (TOTAL) 5J CHLOROFORM 7U 1,2-DICHLOROETHANE 13U METHYL ETHYL KETONE 7U 1,1-TRICHLOROETHANE 7U 1,1-TRICHLOROETHANE 7UJ CARBON TETRACHLORIDE 13U VINYL ACETATE 7U BROMODICHLOROMETHANE	7U 1.2-DICHLOROPROPANE 7U CIS-1.3-DICHLOROPROPENE 7U TRICHLOROETHENE(TRICHLOROETHYLENE) 7UJ DIBROMOCHLOROMETHANE 7U 1.1.2-TRICHLOROETHANE 7U BENZENE 7U TRANS-1.3-DICHLOROPROPENE 7U BROMOFORM 13U METHYL ISOBUTYL KETONE 13U METHYL BUTYL KETONE 7U TETRACHLOROETHENE(TETRACHLOROETHYLE) 7U TOLUENE 7U TOLUENE 7U CHLOROBENZENE 7U STYRENE 7U STYRENE 7U TOTAL XYLENES 25 PERCENT MOISTURE	NE)

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

DUDGEAR	E ORGANICS DATA REPORT	Err Redick It Edd, Allieko, dr.	.0, .2,03
***		THE TYPE: SOIL PROGELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: C9/11/89 1410 STOP: 00/00/0	** +*
	E NO.: 12698 SAS	5 NO.: 4921D D. NO.: N369	**
*** * *	1A3	* * * * * * * * * * * * * * * * * * *	
UG/K		UG/KG ANALYTICAL RESULTS	
110 110 110 300	VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 1,2-DICHLOROETHANE CHLOROFORM 1,2-DICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CARBON TETRACHLORIDE VINYL ACETATE	6U 1,2-DICHLOROPROPANE 6U CIS-1.3-DICHLOROPROPENE 6U TRICHLOROETHENE(TRICHLOROETHYLENE) 6UJ DIBROMOCHLOROMETHANE 6U 1,1,2-TRICHLOROETHANE 6U BROZENE 6U TRANS-1.3-DICHLOROPROPENE 6U BROMOFORM 11U METHYL ISOBUTYL KETONE 11U METHYL BUTYL KETONE 6U TETRACHLOROETHENE(TETRACHLOROETHYLENE) 6U 1,1,2,2-TETRACHLOROETHANE 7 TOLUENE 6U CHLOROBENZENE 6U ETHYL BENZENE 6U STYRENE 6U TOTAL XYLENES 11 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

DUDGEARLE	OPCANICS DATA DEDODT	EIA MEGION IV ESD, MINENS, G	10, 12, 60
*** * * * ** PROJ ** SOUR	ORGANICS DATA REPORT  *******************  ECT NO. 89-537 SAMPLE NO. 39771 SAMPLE LATEX CONSTRUCTION ION ID: SB-02	CITY: SAVA	* * * * * * * * * * * * * * * * * * *
	NO - 10609	SAS NO.: 4921D D. NO.: N	
*** * * *	NO.: 12698	3A3 NO. 43210 D. NO. N	* * * * * * * * * * * * * * * * * * *
UG/KG		UG/KG	ANALYTICAL RESULTS
190 J 190 190 190 300 J 90 90 90 J 90 J 190 90 J	CHLOROMETHANE BROMOMETHANE VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CARBON TETRACHLORIDE VINYL ACETATE BROMODICHLOROMETHANE	9U CÎS- 9U TRIC 9UJ DIBR 9U 1,1, 9U BENZ 9U TRAN 19U METH 19U METH 19U TETR 9U 1,1, 3J TOLU 9U ETHY 9U STYR	S-1.3-DICHLOROPROPENE OFORM VL ISOBUTYL KETONE YL BUTYL KETONE ACHLOROETHENE(TETRACHLOROETHYLENE) 2.2-TETRACHLOROETHANE ENE ROBENZENE L BENZENE

\*\*\*REMARKS\*\*\*

DIID	GEABLE ORGANICS DATA REPORT	/ ESD, ATHENS, GA.	10/12/89
	PROJECT NO. 89-537 SAMPLE NO. 39772 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SS-03		* * * *
	CASE NO.: 12698 SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: N371 * * * * * * * * * * * * * * * * * * *	**********
	11UJ CHLOROMETHANE 11U BROMOMETHANE 11U VINYL CHLORIDE 11U CHLOROETHANE 50U METHYLENE CHLORIDE 40UJ ACETONE 6U CARBON DISULFIDE 6U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 6U 1,2-DICHLOROETHANE 6U 1,2-DICHLOROETHANE 6U 1,2-DICHLOROETHANE 11U CHLOROFORM 6U 1,2-DICHLOROETHANE 11U METHYL ETHYL KETONE 6U 1,1-TRICHLOROETHANE 6UJ 1,1-TRICHLOROETHANE 6UJ CÂRBON TETRACHLORIDE 11U VINYL ACETATE 6U BROMODICHLOROMETHANE	6U 1,2-DICHLOROPROPANE 6U CIS-1,3-DICHLOROPROPENE 6U TRICHLOROETHENE(TRICHLOROETHYLENE) 6UJ DIBROMOCHLOROMETHANE 6U 1,1,2-TRICHLOROETHANE 6U BENZENE 6U TRANS-1,3-DICHLOROPROPENE 6U BROMOFORM 11U METHYL ISOBUTYL KETONE 11U METHYL BUTYL KETONE 6U TETRACHLOROETHENE(TETRACHLOROETHYLE) 6U 1,1,2,2-TETRACHLOROETHANE 6U CHLOROBENZENE 6U CHLOROBENZENE 6U ETHYL BENZENE 6U STYRENE 6U TOTAL XYLENES 10 PERCENT MOISTURE	ENE)

\*\*\*REMARKS\*\*\*

DUDGEARLE		ESD, ATTENS, GA.	10/12/69
*** * * * ** PRO. ** SOUR	E ORGANICS DATA REPORT  * * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CAR CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1615 S	TON **
** CASE	* * * * * * * * * * * * * * * * * * * *	D. NO.: N372 * * * * * * * * * * * * * * * * * * *	** * * * * * * * * * * * * *
18UJ 18U 18U 200U 70UJ 9U 9U 9U 18U 9UJ 18U 9U	VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE (TOTAL) CHLOROFORM 1,2-DICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CARBON TETRACHLORIDE VINYL ACETATE	9U 1,2-DICHLOROPROPANE 9U CIS-1.3-DICHLOROPROPENE 9U TRICHLOROETHENE(TRICHLOROETHYL 9UJ DIBROMOCHLOROMETHANE 9U 1,1,2-TRICHLOROETHANE 9U BENZENE 9U TRANS-1.3-DICHLOROPROPENE 9U BROMOFORM 18U METHYL ISOBUTYL KETONE 18U METHYL BUTYL KETONE 9U TETRACHLOROETHENE(TETRACHLOROE 9U 1,1,2,2-TETRACHLOROETHANE 7J TOLUENE 9U CHLOROBENZENE 21 ETHYL BENZENE 9U STYRENE 28 TOTAL XYLENES 45 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

DURGEARI	E ORGANICS DATA REPORT	ESU, ATRENS, GA.	10/12/69
*** * * ** PRO ** SOU	# * * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CART CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1715 ST	TON **
** CAS	E NO.: 12698 SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: N373 * * * * * * * * * * * * * * * * * * *	**
14UJ 14U 14U 40UJ 50U 7U 7U 7U 6J 7U 14U 7U	VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE (TOTAL) CHLOROFORM 1,2-DICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CARBON TETRACHLORIDE VINYL ACETATE	7U 1,2-DICHLOROPROPANE 7U CIS-1,3-DICHLOROPROPFNE 7UJ TRICHLOROETHENE(TRICHLOROETHYLE 7UJ DIBROMOCHLOROMETHANE 7U 1,1,2-TRICHLOROETHANE 7U BENZENE 7U TRANS-1,3-DICHLOROPROPENE 7U BROMOFORM 14U METHYL ISOBUTYL KETONE 14U METHYL BUTYL KETONE 7U TETRACHLOROETHENE(TETRACHLOROETHUS) 7U TETRACHLOROETHENE(TETRACHLOROETHUS) 7U CHLOROBENZENE 7U CHLOROBENZENE 7U STYRENE 7U TOTAL XYLENES 31 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

<sup>\*\*\*</sup>FOOTNOTES\*\*\* \*\*O-OVOINGLES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

P	URGEABLE ORG	GANICS DATA REPORT	EFA-REGION IV	LSD, ATTIENS, GA.	10/12/69
* * * *	** * * * * * *  * PROJECT  * SOURCE:  * STATION	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY	T: GA ++
*	* CASE NO.	.: 12698 * * * * * * * * * * * * * * ANALYTICAL RESU	* * * * * * * * * * * * *	D. NO.: P236 * * * * * * * * * * * * * * * * * * *	**
	12U BRC 12U VIN 12U CHL 30UJ MCF 6U CAF 6U 1. 6U 1. 6U 1. 6U 1. 6U 1. 6U 1. 12U ME 6U 1.	LOROMETHANE OMOMETHANE NYL CHLORIDE LOROETHANE THYLENE CHLORIDE ETONE RBON DISULFIDE 1-DICHLOROETHENE(1,1-DICHLO 1-DICHLOROETHANE 2-DICHLOROETHENE (TOTAL) LOROFORM 2-DICHLOROETHANE THYL ETHYL KETONE 1,1-TRICHLOROETHANE RBON TETRACHLORIDE NYL ACETATE OMODICHLOROMETHANE	PROETHYLENE)	6U 1.2-DICHLOROPROPANE 6U CIS-1.3-DICHLOROPROPENE 6UJ TRICHLOROETHENE(TRICHLO 6UJ DIBROMOCHLOROMETHANE 6U 1.1.2-TRICHLOROETHANE 6U TRANS-1.3-DICHLOROPROPE 6U BROMOFORM 12U METHYL ISOBUTYL KETONE 12U METHYL BUTYL KETONE 6U TETRACHLOROETHENE(TETRA 6U 1.1.2.2-TETRACHLOROETHA 6U TOLUENE 6U CHLOROBENZENE 6U ETHYL BENZENE 6U STYRENE 6U TOTAL XYLENES 18 PERCENT MOISTURE	ROETHYLENE)  NE  CHLOROETHYLENE)

\*\*\*REMARKS\*\*\*

```
PURGEABLE ORGANICS DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA COLLECTION START: 09/12/89 0845 STOP: 00/00/00
    PROJECT NO. 89-537 SAMPLE NO. 39776 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
                                                                                                                   4.4
* *
    STATION ID: SS-05
                                                                                                                   **
± ±
* *
                                                                                                                   * *
                                         SAS NO.: 4921D
    CASE NO.: 12698
                                                               D. NO.: P237
                                                                                                                   **
* *
UG/KG
   UG/KG
                     ANALYTICAL RESULTS
                                                                               ANALYTICAL RESULTS
                                                                6U 1.2-DICHLOROPROPANE
   11UJ CHLOROMETHANE
                                                                   CÍS-1.3-DICHLOROPROPENE
TRICHLOROETHENE(TRICHLOROETHYLENE)
   11UJ BROMOMETHANE
                                                               6Ŭ.i
    110 VINYL CHLORIDE
                                                                60
                                                               6Ü.i
                                                                   DIBROMOCHI OROMETHANE
   3001
        METHYLENE CHLORIDE
                                                                   1.1.2-TRICHLOROETHANE
                                                                611
   5000
        ACETONE
                                                                60
                                                                   RENZENE
        CARBON DISULFIDE
                                                                    TRANS-1,3-DICHLOROPROPENE
    GUJ
                                                               60.1
                                                                   BROMOFORM
        1.1-DICHLOROETHENE(1.1-DICHLOROETHYLENE)
     6Ü
                                                               6Ú.i
    6UJ 1.1-DICHLOROETHANE
                                                                   METHYL ISOBUTYL KETONE
                                                               1100
     60
        1.2-DICHLOROETHENE (TOTAL)
                                                               1103
                                                                   METHYL BUTYL KETONE
        CHLOROFORM
                                                                    TETRACHLOROETHENE(TETRACHLOROETHYLENE)
     1 1
                                                                6Ü
        1.2-DICHLOROETHANE
METHYL ETHYL KETONE
1,1,1-TRICHLOROETHANE
                                                                   1,1,2,2-TETRACHLOROETHANE
TOLUENE
     6Ù
                                                                60
   11ŬĴ
                                                                11
                                                                ĠÙ.
                                                                    CHLOROBENZENE
     6Ú
     6Ü
        CÁRBON TETRACHLORIDE
                                                                6Ŭ
                                                                    ETHYL BENZENE
   11U.L
        VINYL ACETATE
                                                                6Ü
                                                                    STYRENE
         BROMODICHLOROMETHANE
                                                                   TOTAL XYLENES
                                                                2J
                                                                   PERCENT MOISTURE
```

\*\*\*REMARKS\*\*\*

DUD	GEABLE ORGANICS DATA REPORT	LOD, ATRENO, MA.	10/12/69
### ## ## ## ##	PROJECT NO. 89-537 SAMPLE NO. 39777 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SS-06	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 0950 STOP: 00/00	**
**	CASE NO.: 12698 SAS NO.: 4921D *** *** *** *** *** *** *** *** *** *	D. NO.: P238 * * * * * * * * * * * * * * * * * * *	* * * * * * ***
	11UJ CHLOROMETHANE 11U BROMOMETHANE 11U VINYL CHLORIDE 11U CHLOROETHANE 20UJ METHYLENE CHLORIDE 20U ACETONE 5U CARBON DISULFIDE 5U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 5U 1,2-DICHLOROETHANE 5U 1,2-DICHLOROETHANE 5U 1,2-DICHLOROETHANE 11U METHYL ETHYL KETONE 5U 1,1-TRICHLOROETHANE 5U CARBON TETRACHLORIDE 11U VINYL ACETATE 5U BROMODICHLOROMETHANE	5U 1,2-DICHLOROPROPANE 5U CIS-1.3-DICHLOROPROPENE 5UJ TRICHLOROETHENE(TRICHLOROETHYLENE) 5UJ DIBROMOCHLOROMETHANE 5U 1,1,2-TRICHLOROETHANE 5U TRANS-1,3-DICHLOROPROPENE 5U BROMOFORM 11U METHYL ISOBUTYL KETONE 11U METHYL BUTYL KETONE 5U TETRACHLOROETHENE(TETRACHLOROETHYLENE) 5U 1,1,2,2-TETRACHLOROETHANE 5U CHLOROBENZENE 5U CHLOROBENZENE 5U STYRENE 5U TOTAL XYLENES 6 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

DUDGEARI	LE ORGANICS DATA REPORT	ESU, AIRLINS, UA.	10/12/09
***	LE ORGANICS DATA REPORT  * * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1005 STOR	√i ** ++
	SE NO.: 12698 SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: P239  * * * * * * * * * * * * * * * * * * *	**
130J 130 130J 300J 60J 61 61 130J 61 130J 61	V VINYL CHLORIDE U CHLOROETHANE U CHLOROETHANE U METHYLENE CHLORIDE U ACETONE U CARBON DISULFIDE U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) U 1,2-DICHLOROETHANE U 1,2-DICHLOROETHENE (TOTAL) J CHLOROFORM U 1.2-DICHLOROETHANE U METHYL ETHYL KETONE U 1,1-TRICHLOROETHANE U CARBON TETRACHLORIDE U VINYL ACETATE	6U 1.2-DICHLOROPROPANE 6U CIS-1.3-DICHLOROPROPENE 6UJ TRICHLOROETHENE(TRICHLOROETHYLENI 6UJ DIBROMOCHLOROMETHANE 6U 1.1.2-TRICHLOROETHANE 6U TRANS-1.3-DICHLOROPROPENE 6U BROMOFORM 13U METHYL ISOBUTYL KETONE 13U METHYL BUTYL KETONE 6U TETRACHLOROETHENE(TETRACHLOROETH' 6U 1,1.2.2-TETRACHLOROETHANE 2J TOLUENE 6U CHLOROBENZENE 6U CHLOROBENZENE 6U STYRENE 6U STYRENE 6U TOTAL XYLENES 21 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

םוום '	GEABLE ORGANICS DATA REPORT	ESD, ATHENS, GA.	10/12/69
*** ** ** **	PROJECT NO. 89-537 SAMPLE NO. 39779 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SD-01	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1300 STOP:	** ++
**	CASE NO.: 12698 SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: P240 * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * ***
	17UJ CHLOROMETHANE 17U BROMOMETHANE 17U VINYL CHLORIDE 17U CHLOROETHANE 40UJ METHYLENE CHLORIDE 17U ACETONE 8U CARBON DISULFIDE 8U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 8U 1,2-DICHLOROETHENE (TOTAL) 8U 1,2-DICHLOROETHANE 8U 1,2-DICHLOROETHANE 17U METHYL ETHYL KETONE 8U 1,1-TRICHLOROETHANE 17U METHYL ETHYL KETONE 8U CARBON TETRACHLORIDE 17U VINYL ACETATE 8U BROMODICHLOROMETHANE	8U 1.2-DICHLOROPROPANE 8U CIS-1.3-DICHLOROPROPENE 8UJ TRICHLOROETHENE(TRICHLOROETHYLENE) 8UJ DIBROMOCHLOROMETHANE 8U 1.1.2-TRICHLOROETHANE 8U BENZENE 8U TRANS-1.3-DICHLOROPROPENE 8U BROMOFORM 17U METHYL ISOBUTYL KETONE 17U METHYL BUTYL KETONE 8U TETRACHLOROETHENE(TETRACHLOROETHYL 8U 1.1.2.2-TETRACHLOROETHANE 8U TOLUENE 8U CHLOROBENZENE 8U ETHYL BENZENE 8U ETHYL BENZENE 8U STYRENE 8U TOTAL XYLENES 40 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

DUD	GEABLE ORGANICS DATA REPORT	V ESD, ATRENS, GA.	10/12/69
	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* * * * * * **
**	PROJECT NO. 89-537 SAMPLE NO. 39780 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: G CARTON	**
* *	SOURCE: LATEX CONSTRUCTION	CITY: SAVANNAH ST: GA	++
**	STATION ID: SD-02	COLLECTION START: 09/12/89 1335 STOP: 00/00/00	
**	CASE NO : 10000	D NO - B341	**
***	CASE NO.: 12698 SAS NO.: 4921D	* * * * * * * * * * * * * * * * * * *	
	UG/KG ANALYTICAL RESULTS	UG/KG ANALYTICAL RESULTS	
	37UJ CHLOROMETHANE	19U 1,2-DICHLOROPROPANE	
	37U BROMOMETHANE	19U CIS-1,3-DICHLOROPROPENE	
	37U VINYL CHLORIDE 37U CHLOROETHANE	19UJ TRICHLOROETHENE(TRICHLOROETHYLENE) 19UJ DIBROMOCHLOROMETHANE	
	90UJ METHYLENE CHLORIDE	19U 1,1,2 TRICHLOROETHANE	
	370 ACETONE	19U BENZENE	
	19U CARBON DISULFIDE	19U TRANS-1,3-DICHLOROPROPENE	
	19U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	19U BROMOFORM	
	19U 1,1-DICHLOROETHANE 19U 1,2-DICHLOROETHENE (TOTAL)	37U METHYL ISOBUTYL KETONE	
	19U 1,2-DICHLOROETHENE (TOTAL) 19U CHLOROFORM	37U METHYL BUTYL KETONE 19U TETRACHLOROETHENE(TETRACHLOROETHYLENE)	
	19U 1,2-DICHLOROETHANE	19U 1,1,2,2-TETRACHLOROETHANE	
	37U MÉTHYL ETHYL KETÖNE	19U TOLUENE	
	19U 1,1,1-TRICHLOROETHANE	19U CHLOROBENZENE	
	19U CARBON TETRACHLORIDE	19U ETHYL BENZËNE	
	37U VINYL ACETATE 19U BROMODICHLOROMETHANE	19U STYRENE 19U TOTAL XYLENES	
	130 DIVONODIONEDIVONI: INMIL	73 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

DIID	GEABLE ORGANICS DATA REPORT	IV ESD, ATHENS, GA.	10/12/89
***	PROJECT NO. 89-507 SAMPLE NO. 39781 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SD-03	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1440 STOP: 00/0	# ∔
**	CASE NO.: 12698 SAS NO.: 4921D *** * * * * * * * * * * * * * * * * *	D. NO.: P242  * * * * * * * * * * * * * * * * * * *	**
	19UJ CHLOROMETHANE 19U BROMOMETHANE 19U VINYL CHLORIDE 19U CHLOROETHANE 60UJ METHYLENE CHLORIDE 30U ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,1-DICHLOROETHANE 10U 1,2-DICHLOROETHENE (TOTAL) 4J CHLOROFORM 10U 1,2-DICHLOROETHANE 19U METHYL ETHYL KETONE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 19U VINYL ACETATE 10U BROMODICHLOROMETHANE	10U 1,2-DICHLOROPROPANE 10U CIS-1.3-DICHLOROPROPENE 10UJ TRICHLOROETHENE(TRICHLOROETHYLENE) 10UJ DIBROMOCHLOROMETHANE 10U 1,1,2-TRICHLOROETHANE 10U BENZENE 10U TRANS-1.3-DICHLOROPROPENE 10U BROMOFORM 19U METHYL ISOBUTYL KETONE 19U METHYL BUTYL KETONE 10U TETRACHLOROETHENE(TETRACHLOROETHYLENE) 10U TOLUENE 10U TOLUENE 10U CHLOROBENZENE 10U CHLOROBENZENE 10U STYRENE 10U TOTAL XYLENES 48 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

DURGEARI E	ORGANICS DATA REPORT	V LSD, ATRENS, CA.	10/ 12/ 69
*** * * * ** PROJE ** SOUR	A * * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1510 STOP	**
** CASE	* * * * * * * * * * * * * * * * * * * *	D. NO.: P243 * * * * * * * * * * * * * * * * * * *	**
16U 16U 16U 40UJ 30U 8U 8U 8U 2J 8U 16U 8U	CHLOROMETHANE BROMOMETHANE VINYL CHLORIDE CHLOROETHANE METHYLENE CHLORIDE ACETONE CARBON DISULFIDE 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE (TOTAL) CHLOROFORM 1,2-DICHLOROETHANE METHYL ETHYL KETONE 1,1,1-TRICHLOROETHANE CÁRBON TETRACHLORIDE VINYL ACETATE BROMODICHLOROMETHANE	8U 1,2-DICHLOROPROPANE 8U CIS-1,3-DICHLOROPROPENE 8UJ TRICHLOROETHENE(TRICHLOROETHYLENE 8UJ DIBROMOCHLOROMETHANE 8U 1,1,2-TRICHLOROETHANE 8U BENZENE 8U TRANS-1,3-DICHLOROPROPENE 8U BROMOFORM 16U METHYL ISOBUTYL KETONE 16U METHYL BUTYL KETONE 8U TETRACHLOROETHENE(TETRACHLOROETHY 8U 1,1,2,2-TETRACHLOROETHANE 8U TOLÜENE 8U CHLOROBENZENE 8U ETHYL BENZENE 8U STYRENE 8U TOTAL XYLENES 37 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

## PROJECT NO. 89-537 SAMPLE NO. 39783 SAMPLE TYPE: SOIL ## PROJECT NO. 89-537 SAMPLE NO. 39783 SAMPLE TYPE: SOIL ## SOINCE: LATEX CONSTRUCTION ## SOINCE: LATEX CONSTRUCTION ## COLLECTION START: 09/12/89 1550 STOP: 00/00/00 ## COLLETION START: 09/12/89 1550 ## COLLECTION START: 09/12/89 1550 ##	DHP	SEARLE	OPERNICS DATA	DEDODT		EPA-	-REGION IV	/ ESU,	AIRE	45, UA.	•					10/12/6	9
## SOURCE: LAFEX CONSTRUCTION CITY SAVANNAH ST. GA	* * *	* * *	* * * * * * *	* * * * * *	* * * * *	* * * * *	* * * * *	* * :	* *	* * *	* * *	* * * *	* * * *	* * * *	* * * *	* * * * *:	* *
## STATION ID: SD-05  ## CASE NO.: 12698	* *				IO. 39783 S	AMPLE TYPE	E: SOIL										**
*** UG/KG ANALYTICAL RESULTS  *** UG/KG ANALYTICAL RESULTS  *** UG/KG ANALYTICAL RESULTS  ***  *** UG/KG ANALYTICAL RESULTS   ***  ***  ***  ***  ***  ***  ***				TRUCTION				ý	ITY:	SAVANN	VAH	/ /	<u> </u>	<i>i</i>			
** CASE NO.: 12698		51AT.	ION 1D: 5D-05					,	OLLE	CITON S	START:	09/12/89	1550	STUP:	00/00/00		
UG/KG ANALYTICAL RESULTS  20UJ CHLOROMETHANE 20U BROMOMETHANE 20U VINYL CHLORIDE 20U CHLOROETHANE 20U VINYL CHLORIDE 20U CHLOROETHANE 30U CHLOROETHANE 40UJ TRICHLOROETHENE(TRICHLOROETHYLENE) 30U CHLOROETHANE 50UJ METHYLENE CHLORIDE 10U CARBON DISULFIDE 10U CARBON DISULFIDE 10U 1.1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1.2-DICHLOROETHENE 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.1-TRICHLOROETHANE 10U 1.1-TRICHLOROETHANE 10U 1.1-TRICHLOROETHANE 10U 1.1-TRICHLOROETHANE 10U 1.2-DICHLOROETHANE 10U 1.3-TRICHLOROETHANE 10U 1.4-TRICHLOROETHANE 10U 1.5-TRICHLOROETHANE 10U 1.5-TRICHLOROETHANE 10U 1.5-TRICHLOROETHANE 10U 5TYRENE 10U 5TYRENE 10U 5TYRENE 10U 5TYRENE		CASE	NO - 12608			CAC NO .	4021D		ת מ	7 · P2/	14						
20U CHLOROMETHANE 20U BROMOMETHANE 20U VINYL CHLORIDE 20U VINYL CHLORIDE 30U CHLOROETHANE 40U METHYLENE CHLORIDE 40U ACETONE 40U CARBON DISULFIDE 40U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 40U 1,2-DICHLOROETHENE (TOTAL) 40U 1,2-DICHLOROETHANE 40U METHYL BUTYL KETONE 40U 1,2-DICHLOROETHANE 40U 1,2-DICHLOROETHANE 40U 1,2-DICHLOROETHANE 40U 1,2-DICHLOROETHANE 40U METHYL BUTYL KETONE 40U 1,2-DICHLOROETHANE 40U 1,2-DICHLOROETHANE 40U 1,2-DICHLOROETHANE 40U 1,1-TRICHLOROETHANE				* * * * * *	* * * * *	* * * * *	* * * * *	* * :	· * *	· * * *	* * *	* * * *	* * * *	* * * *	* * * *	* * * * *	**
20U BROMOMETHANE 20U VINYL CHLORIDE 20U CHLOROETHANE 60UJ METHYLENE CHLORIDE 70U ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHANE 10U 1,2-DICHLOROETHENE (TOTAL) 10U CLOROFORM 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U CHLOROFORM 10U 1,1-DICHLOROETHANE 10U CHLOROFORM 10U 1,2-DICHLOROETHANE 10U CHLOROFORM 10U 1,2-DICHLOROETHANE 10U CHLOROETHANE 10U CHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U STYRENE 10U STYRENE 10U STYRENE 10U TOTAL XYLENES		UG/KG		ANALYTICAL	RESULTS			U	3/KG			ANALYTI	CAL RESI	JLTS			
20U VINYL CHLORIDE 20U CHLOROETHANE 60UJ METHYLENE CHLORIDE 70U ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U BROMODICHLOROMETHANE 10U STYRENE 10U BROMODICHLOROMETHANE																	
20U CHLOROETHANE 60UJ METHYLENE CHLORIDE 70U ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHENE(1.1-DICHLOROETHYLENE) 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHANE 10U 1,1-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-DICHLOROETHANE 10U 1,1-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U STYRENE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES				-										00 ENE \			
60UJ METHYLENE CHLORIDE 70U ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,2-DICHLOROETHENE (TOTAL) 10U CHLOROFORM 10U 1,2-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES				Ľ										TYLENE)			
70Ü ACETONE 10U CARBON DISULFIDE 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,2-DICHLOROETHENE (TOTAL) 10U CHLOROFORM 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1,1-TRICHLOROETHANE 10U 1,1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U BROMODICHLOROMETHANE 10U BROMODICHLOROMETHANE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES				ORIDE													
10U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE) 10U 1,1-DICHLOROETHANE 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHENE (TOTAL) 10U 1,2-DICHLOROETHANE 10U 1,2-DICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U 1,1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U STYRENE 10U BROMODICHLOROMETHANE 10U STYRENE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES		70Ü							10U	BÉNZE	NE						
100 1,1-DICHLOROETHANE 100 1,2-DICHLOROETHENE (TOTAL) 200 METHYL ISOBUTYL KETONE 100 1,2-DICHLOROETHANE 100 1,2-DICHLOROETHANE 100 1,2-DICHLOROETHANE 200 METHYL ETHYL KETONE 100 1,1-TRICHLOROETHANE 100 1,1-TRICHLOROETHANE 100 CARBON TETRACHLORIDE 100 CARBON TETRACHLORIDE 100 STYRENE 100 BROMODICHLOROMETHANE 100 BROMODICHLOROMETHANE 100 TOTAL XYLENES												ICHLOROPR	OPENE				
10U 1,2-DĪCHLOROĒTHENĒ (TOTAL)  10U CHLOROFORM  10U 1,2-DICHLOROĒTHANĒ  20U MĒTHYL ETHYL KETONĒ  10U 1,1,1-TRICHLOROĒTHANĒ  10U 1,1,1-TRICHLOROĒTHANĒ  10U CARBON TĒTRĀCHLORĪDĒ  20U VINYL ĀCĒTĀTĒ  10U BROMODĪCHLOROMĒTHANĒ  10U BROMODĪCHLOROMĒTHANĒ  10U BROMODĪCHLOROMĒTHANĒ  10U TOTAL XYLĒNĒS					CHLOROETHYL	ENE)						UTVI VETO	NE			C	
10U CHLOROFORM 10U 1.2-DICHLOROETHANE 10U 1.2-DICHLOROETHANE 20U METHYL ETHYL KETONE 10U 1.1-TRICHLOROETHANE 10U 1.1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 10U VINYL ACETATE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES					)								TVL				
10U 1.2-DÎCHLOROETHANE 20U METHYL ETHYL KETONE 10U 1.1-TRICHLOROETHANE 10U CARBON TETRACHLORIDE 10U CARBON TETRACHLORIDE 20U VINYL ACETATE 10U BROMODICHLOROMETHANE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES				ITILINE (101A)	- /								TRACHLO	ROETHYLI	ENE)		
10U 1.1.1—TRICHLOROETHANE 10U CHLOROBENZENE 10U CARBON TETRACHLORIDE 10U ETHYL BENZENE 20U VINYL ACETATE 10U STYRENE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES		100	1.2-DICHLOROE							1,1,2	, 2-TET						
10Ú CÁRBON TETRACHLORÍDE 10Ú ÉTHÝL BENZENE 20U VINYL ACETATE 10U STYRENE 10U BROMODICHLOROMETHANE 10U TOTAL XYLENES																	
20U VINYL ACETATE 10U STYRËNE 10U BROMODICHLOROMETHANE 10U TOTAL XYLËNES																	
10U BROMODICHLOROMETHANE 10U TOTAL XYLENES												NL					
												ES					
50 PERCENT MOISTURE				<del>-</del>					50								

\*\*\*REMARKS\*\*\*

<sup>\*\*\*</sup>FOOTNOTES\*\*\* \*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

210

100

VINYL ACETATE

BROMODICHLOROMETHANE

\*\*\*REMARKS\*\*\*

STYRENE

TOTAL XYLENES

PERCENT MOISTURE

100

100

<sup>\*\*\*</sup>FOOTNOTES\*\*\* \*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

<sup>\*</sup>R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV COLLEGE STATION RD. ATHENS, GA. 30613



\*\*\*\*MEMORANDUM\*\*\*\*\*

DATE: 10/13/89

SUBJECT: Results of Pesticide/PCB Analysis;

89-537 LATEX CONSTRUCTION

SAVANNAH GA

CASE NO: 12698SAS NO: 4921D

FROM: Robert W. Knight

Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

**ATTACHMENT** 

10/12/89

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON
    PROJECT NO. 89-537 SAMPLE NO. 39768 SAMPLE TYPE: SOIL
                                                                CITY: SAVANNAH ST: GA
COLLECTION START: 09/11/69 1245 STOP: 00/00/00
    SOURCE: LATEX CONSTRUCTION
                                                                                                                       * *
    STATION ID: SS-01
CASE NUMBER: 12698
* *
                                                                                                                       **
                              SAS NUMBER: 4921D
                                                                 D. NUMBER: N367
                                                                                                                       * *
                                                                                                                       **
UG/KG
                     ANALYTICAL RESULTS
                                                                UG/KG
                                                                                   ANALYTICAL RESULTS
   9.10 ALPHA-BHC
                                                                 91U METHOXYCHLOR
   9.10 BETA-BHC
                                                                      ENDRIN KETONE
                                                                 180
   9.10 DELTA-BHC
                                                                      CHLORDANE (TECH. MIXTURE) /1
   9.10
         GAMMA-BHC (LINDANE)
                                                                 910
                                                                      GAMMA-CHLORDANE
         HEPTACHLOR
   9.10
                                                                 910
                                                                      ALPHA--CHLORDANE
   9.10
         ALDRIN
                                                                 180U
                                                                      TOXAPHENE
                                                                      PCB-1016 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
   9.10
         HEPTACHLOR EPOXIDE
                                                                 91 Ü
   9.10
         ENDOSULFAN I (ALPHA)
                                                                 91 U
         DIELDRIN
                                                                      PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
    180
                                                                 910
     37
         4.4'-DDE (P.P'-DDE)
                                                                 91U
         ENDRIN
                                                                      PCB-1248 (AROCLOR 1248)
    18U
                                                                 910
                                                                      PCB-1254 (AROCLOR 1254)
PCB-1260 (AROCLOR 1260)
PERCENT MOISTURE
         ENDOSULFAN II (BETA)
4,4'-DDD (P,P'-DDD)
ENDOSULFAN SULFATE
    18U
                                                                 180U
    18U
                                                                180U
    180
         4.4'-DDT (P.P'-DDT)
    18U
```

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

## SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD. ATHENS. GA.

10/12/89

PESTICIDES/PCB'S DATA REPORT PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA PROJECT NO. 89-537 SAMPLE NO. 39769 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SB-01 CASE NUMBER: 12698 COLLECTION START: 09/11/89 1255 STOP: 00/00/00 **‡** ‡ \* \* SAS NUMBER: 4921D D. NUMBER: N368 \* \*\* \* \*

UG/KG ANALYTICAL RESULTS UG/KG ANALYTICAL RESULTS 11U ALPHA-BHC 1100 METHOXYCHLOR 11U BETA-BHC 21U ENDRIN KETONE

11U DELTA-BHC CHLORDANE (TECH. MIXTURE) /1 110 GAMMA-BHC (LINDAME) GAMMA-CHLORDANE /2 11U **HEPTACHLOR** ALPHA-CHLORDANE TOXAPHENE 110U 110 ALDRIN 210U HEPTACHLOR EPOXIDE PCB-1016 (AROCLOR 1016) 110 110U

11U ENDOSULFAN I (ALPHA) 21U DIELDRIN PCB-1221 (AROCLOR 1221) 1100 PCB-1232 (AROCLOR 1232) PCB-1242 (AROCLOR 1242) PCB-1248 (AROCLOR 1248) 1100 21U 4,4'-DDE (P,P'-DDE) 1100 21U ENDRIN 1100 21Ŭ ENDOSULFAN II (BETA)

210U PCB-1254 (AROCLOR 1254) 210U PCB-1260 (AROCLOR 1260) 21U 4,4'-DDD (P,P'-DDD) 21U ENDOSULFAN SULFATE 21U 4,4'-DDT (P,P'-DDT) 25 PERCENT MOISTURE

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON
    PROJECT NO. 89-537 SAMPLE NO. 39770 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
STATION ID: SS-02
CASE NUMBER: 12698
                                                             CITY: SAVANNAH
                                                                             ST: GA
                                                                                                                 4.4
                                                             COLLECTION START: 09/11/89 1410 STOP: 00/00/00
* *
                                                                                                                 * *
                             SAS NUMBER: 4921D
                                                              D. NUMBER: N369
**
                                                                                                                 * *
                                                                                                                 * *
UG/KG
                    ANALYTICAL RESULTS
                                                             UG/KG
                                                                               ANALYTICAL RESULTS
    18U ALPHA-BHC
                                                             180U
                                                                  METHOXYCHLOR
        BETA-BHC
    18U
                                                              36U
                                                                  ENDRIN KETONE
    180
        DELTA-BHC
                                                                   CHLORDANE (TECH. MIXTURE) /1
    180
        GAMMA-BHC (LINDANE)
                                                             1800
                                                                   GAMMA-CHLORDANE
                                                                                  /2
                                                                  ALPHA-CHLORDANE
TOXAPHENE
    180
        HEPTACHLOR
                                                             1800
        ALDRIN
    180
                                                             360U
    18U
        HEPTACHLOR EPOXIDE
                                                             180U
                                                                  PCB-1016 (AROCLOR 1016)
        ENDOSULFAN I (ALPHA)
                                                                  PCB-1221 (AROCLOR 1221)
    180
                                                             1800
        DIELDRIN
                                                                  PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
    36U
                                                             1800
    36U
        4.4'-DDE (P.P'-DDE)
                                                             1800
    36U
        ENDRIN
                                                             1800
        ENDOSULFAN II (BETA)
    36U
                                                                  PCB-1254 (AROCLOR 1254)
                                                             3600
        4,4'-DDD (P,P'-DDD)
ENDOSULFAN SULFATE
                                                                  PCB-1260 (AROCLOR 1260)
PERCENT MOISTURE
    36U
                                                             3600
    36U
        4,4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON ST: GAVANNAH COLLECTION START: 09/11/89 1445 STOP: 00/00/00
    PROJECT NO. 89-537 SAMPLE NO. 39771 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
                                                                                                                ++
                                                                                                                * *
    STATION ID: SB-02
                            SAS NUMBER: 4921D
                                                             D. NUMBER: N370
                                                                                                                * *
* *
    CASE NUMBER: 12698
                                                                                                                * *
UG/KG
                  ANALYTICAL RESULTS
                                                            UG/KG
                                                                             ANALYTICAL RESULTS
                                                             300U METHOXYCHLOR
    30U ALPHA-BHC
                                                             590 ENDRIN KETONE
    30U BETA-BHC
    300 DELTA-BHC
                                                                  CHLORDANE (TECH. MIXTURE) /1
    300
        GAMMA-BHC (LINDANE)
                                                             3000
                                                                 GAMMA-CHLORDANE
ALPHA-CHLORDANE
    300
        HEPTACHLOR
                                                             3000
                                                             590U
                                                                  TOXAPHENE
    300
        ALDRIN
                                                             3000
                                                                 PCB-1016 (AROCLOR 1016)
    30U
        HEPTACHLOR EPOXIDE
        ENDOSULFAN I (ALPHA)
                                                             3000
                                                                 PCB-1221 (AROCLOR 1221)
    300
                                                                 PCB-1232 (AROCLOR 1232)
    59U
        DIELDRIN
                                                             300U
                                                             3000
                                                                 PCB-1242 (AROCLOR 1242)
    59U
        4.4'-DDE (P.P'-DDE)
                                                                 PCB-1248 (AROCLOR 1248)
    590
        ENDRIN
                                                             3000
                                                            590U PCB-1254 (AROCLOR 1254)
590U PCB-1260 (AROCLOR 1260)
46 PERCENT MOISTURE
    59U ENDOSULFAN II (BETA)
    59U
        4.4'-DDD (P.P'-DDD)
    59U
        ENDOSULFAN SULFATE
    59U
        4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY, G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1605 STOP: 00/00/00 D. NUMBER: N371
    PROJECT NO. 89-537 SAMPLE NO. 39772 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
* *
    STATION ID: SS-03
**
                                SAS NUMBER: 4921D
    CASE NUMBER: 12698
                                                                                                                             * *
                                                                                                                             **
* *
   UG/KG
                     ANALYTICAL RESULTS
                                                                    UG/KG
                                                                                       ANALYTICAL RESULTS
                                                                     89U METHOXYCHLOR
   8.9U ALPHA-BHC
   8.90 BETA-BHC
                                                                     180
                                                                         ENDRIN KETONE
   8.90 DELTA-BHC
                                                                          CHLORDANE (TECH. MIXTURE) /1
                                                                          GAMMA-CHLORDANE
   8.90
         GAMMA-BHC (LINDANE)
                                                                     890
                                                                                          /2
/2
                                                                     890
                                                                          ALPHA-CHLORDANE
   8,90
         HEPTACHLOR
   8.90
         ALDRIN
                                                                    1800
                                                                         TOXAPHENE
                                                                     89U PCB-1016 (AROCLOR 1016)
89U PCB-1221 (AROCLOR 1221)
89U PCB-1232 (AROCLOR 1232)
    8.90
         HEPTACHLOR EPOXIDE
    8.90
         ENDOSULFAN I (ALPHA)
         DIELDRIN
    180
                                                                    89U PCB-1242 (AROCLOR 1242)
89U PCB-1248 (AROCLOR 1248)
180U PCB-1254 (AROCLOR 1254)
180U PCB-1260 (AROCLOR 1260)
    18U 4.4'-DDE (P.P'-DDE)
    18U ENDRIN
    18U ENDOSULFAN II (BETA)
    18U 4,4'-DDD (P,P'-DDD)
18U ENDOSULFAN SULFATE
                                                                      10 PERCENT MOISTURE
         4.4'-DDT (P.P'-DDT)
    18U
```

\*\*\*REMARKS\*\*\*

10/12/89

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1615 STOP: 00/00/00
    PROJECT NO. 89-537 SAMPLE NO. 39773 SAMPLE TYPE: SOIL
     SOURCE: LATEX CONSTRUCTION
     STATION ID: SB-03
* *
                                                                                                                              **
                                SAS NUMBER: 4921D
    CASE NUMBER: 12698
                                                                     D. NUMBER: N372
                                                                                                                              * *
**
**
                                                                                                                              * *
   UG/KG
                     ANALYTICAL RESULTS
                                                                    UG/KG
                                                                                       ANALYTICAL RESULTS
     14U ALPHA-BHC
                                                                    140U METHOXYCHLOR
     14U BETA-BHC
                                                                     290
                                                                          ENDRIN KETONE
     14U DELTA-BHC
                                                                          CHLORDANE (TECH. MIXTURE) /1
     14U
         GAMMA-BHC (LINDANE)
                                                                    140U
                                                                          GAMMA-CHI.ORDANE
                                                                                          /2
                                                                          ALPHA -CHLORDANE
TOXAPHENE
     14U
         HEPTACHLOR
                                                                    140U
         ALDRIN
                                                                    290U
     140
                                                                         PCB-1016 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
     140
         HEPTACHLOR EPOXIDE
                                                                    140U
     14U ENDOSULFAN I (ALPHA)
                                                                    140U
                                                                         PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
     29U DIELDRIN
                                                                    140U
     29U 4.4'-DDE (P.P'-DDE)
                                                                    140U
                                                                    280 PCB-1248 (AROCLOR 1242)
290U PCB-1254 (AROCLOR 1254)
290U PCB-1260 (AROCLOR 1260)
45 PERCENT MOISTURE
     29U ENDRIN
        ENDOSULFAN II (BETA)
4,4'-DDD (P,P'-DDD)
ENDOSULFAN SULFATE
     29U
     29U
     29U
         4,4'-DDT (P,P'-DDT)
     29U
```

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REALYSIS IS NECESSARY FOR VERIFICATION.

\*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.

10/12/89

PESTICIDES/PCB'S DATA REPORT	LFA-REGION IV ESD, ATRENS, GA.	10/12/69
*** * * * * * * * * * * * * * * * * *		**
*** * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * *
12U ALPHA-BHC 12U BETA-BHC 12U DELTA-BHC 12U GAMMA-BHC (LINDANE) 12U HEPTACHLOR 12U ALDRIN 12U HEPTACHLOR EPOXIDE 12U ENDOSULFAN I (ALPHA) 23U DIELDRIN 23U 4,4'-DDE (P.P'-DDE) 23U ENDOSULFAN II (BETA) 23U 4,4'-DDD (P,P'-DDD) 23U ENDOSULFAN SULFATE 23U 4,4'-DDT (P,P'-DDT)	120U METHOXYCHLOR 23U ENDRIN KETONE CHLORDANE (TECH. MIXTURE) /1 120U GAMMA-CHLORDANE /2 120U ALPHA-CHLORDANE /2 230U TOXAPHENE 120U PCB-1016 (AROCLOR 1016) 120U PCB-1221 (AROCLOR 1221) 120U PCB-1232 (AROCLOR 1232) 120U PCB-1242 (AROCLOR 1242) 120U PCB-1248 (AROCLOR 1248) 230U PCB-1254 (AROCLOR 1254) 230U PCB-1260 (AROCLOR 1260) 31 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

## SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

10/12/89

PESTICIDES/PCB'S DATA REPORT	EPA-REGION IV ESD, ATHENS, GA.	10/12/69
***	E TYPE: SQIL PROG ELEM: NSF CONTROL START: ( D. NUMBER: P236	## ST: GA ## ## ## ## ## ## ## ## ## ## ## ## ##
*** * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	ANALYTICAL RESULTS
20U ALPHA-BHC 20U BETA-BHC 20U DELTA-BHC 20U GAMMA-BHC (LINDANE) 20U HEPTACHLOR 20U ALDRIN 20U HEPTACHLOR EPOXIDE 20U ENDOSULFAN I (ALPHA) 39U DIELDRIN 39U 4,4'-DDE (P.P'-DDE) 39U ENDOSULFAN II (BETA) 39U ENDOSULFAN II (BETA) 39U 4,4'-DDD (P,P'-DDD) 39U ENDOSULFAN SULFATE 39U 4,4'-DDT (P,P'-DDT)	200U METHOXYCHLOR 39U ENDRIN KETONI CHLORDANE (TI 200U GAMMA-CHLORD) 390U TOXAPHENE 200U PCB-1221 (ARI 200U PCB-1232 (ARI 200U PCB-1242 (ARI 200U PCB-1244 (ARI 390U PCB-1254 (ARI 390U PCB-1254 (ARI 390U PCB-1260 (ARI 390U	ECH. MIXTURE) /1 ANE /2 COLOR 1016) COLOR 1221) COLOR 1232) COLOR 1242) COLOR 1248) COLOR 1254) COLOR 1260)

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

10/12/89

```
PESTICIDES/PCB'S DATA REPORT
PROJECT NO. 89-537 SAMPLE NO. 39776 SAMPLE TYPE: SOIL
                                                            PROG ELEM: NSF COLLECTED BY: G CARTON
    SOURCE: LATEX CONSTRUCTION
                                                            CITY: SAVANNAH
                                                                            ST: GA
                                                                                                                44
    STATION ID: SS-05
                                                            COLLECTION START: 09/12/89 0845 STOP: 00/00/00
± ±
                                                                                                                * *
    CASE NUMBER: 12698
                            SAS NUMBER: 4921D
                                                             D. NUMBER: P237
                                                                                                                **
**
                                                                                                                * *
UG/KG
                    ANALYTICAL RESULTS
                                                            UG/KG
                                                                              ANALYTICAL RESULTS
    89U ALPHA-BHC
                                                             890U METHOXYCHLOR
    89U BETA-BHC
                                                             1800
                                                                 ENDRIN KETONE
    89U DELTA-BHC
                                                                  CHLORDANE (TECH. MIXTURE) /1
    890
        GAMMA-BHC (LINDANE)
                                                             930
                                                                 GAMMA-CHLORDANE /2
                                                                 ALPHA-CHLORDANE
TOXAPHENE
    89U
        HEPTACHLOR
                                                            890Ú
    89U
        ALDRIN
                                                            1800U
                                                                 PCB-121 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
PCB-1232 (AROCLOR 1232)
    890
        HEPTACHLOR EPOXIDE
                                                            890U
    89U ENDOSULFAN I (ALPHA)
                                                             890U
   180U DIELDRIN
                                                             890U
                                                                 PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
   180U 4.4'-DDE (P.P'-DDE)
                                                             890U
   180U ENDRIN
                                                            890U
                                                            1800U PCB-1254 (AROCLOR 1254)
1800U PCB-1260 (AROCLOR 1260)
   180U ENDOSULFAN II (BETA)
   180U 4,4'-DDD (P,P'-DDD)
180U ENDOSULFAN SULFATE
                                                              10 PERCENT MOISTURE
   180U 4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

## SAMPLE AND ANALYSIS MANAGEMENT SYSTEM EPA-REGION IV ESD, ATHENS, GA.

10/12/89

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON
    PROJECT NO. 89-537 SAMPLE NO. 39777 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
                                                                   CITY: SAVANNAH
                                                                                             ST: GA
                                                                                                                           4 4
                                                                   COLLECTION START: 09/12/89 0950 STOP: 00/00/00
    STATION ID: SS-06
CASE NUMBER: 12698
* *
                                                                                                                           **
                               SAS NUMBER: 4921D
                                                                   D. NUMBER: P238
                                                                                                                           * *
                                                                                                                           * *
UG/KG
                      ANALYTICAL RESULTS
                                                                   UG/KG
                                                                                      ANALYTICAL RESULTS
   8.5U ALPHA-BHC
                                                                    85U METHOXYCHLOR
                                                                    170
                                                                        ENDRIN KETONE
   8.50 BETA-BHC
         DELTA-BHC
   8.50
                                                                        CHLORDANE (TECH. MIXTURE) /1
   8.50
         GAMMA-BHC (LINDANE)
                                                                    85U
                                                                        GAMMA-CHLORDANE
ALPHA-CHLORDANE
                                                                                         /2
/2
   8.5Ŭ
         HEPTACHLOR
                                                                    35U
                                                                        TOXAPHENE
   8.50
         ALDRIN
                                                                   1700
         HEPTACHLOR EPOXIDE
                                                                    85U
                                                                        PCB-1016 (AROCLOR 1016)
   8.5U ENDOSULFAN I (ALPHA)
17U DIELDRIN
                                                                    850
                                                                        PCB-1221 (AROCLOR 1221)
                                                                        PCB-1232 (AROCLOR 1232)
                                                                    85U
                                                                   850 PCB-1232 (ARCICLOR 1232)
850 PCB-1242 (AROCLOR 1242)
850 PCB-1248 (AROCLOR 1248)
1700 PCB-1254 (AROCLOR 1254)
1700 PCB-1260 (AROCLOR 1260)
6 PERCENT MOISTURE
    17U 4.4'-DDE (P.P'-DDE)
    17U ENDRIN
         ENDOSULFAN II (BETA)
4,4'-DDD (P,P'-DDD)
ENDOSULFAN SULFATE
    1 7 U
     170
     1 7U
         4.4'-DDT (P.P'-DDT)
    17U
```

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA COLLECTION START: 09/12/89 1005 STOP: 00/00/00
    PROJECT NO. 89-537 SAMPLE NO. 39778 SAMPLE TYPE: SOIL
    SOURCE: LATEX CONSTRUCTION
                                                                                                                             ..
. .
    STATION ID: SB-05
CASE NUMBER: 12698
                                                                                                                             * *
± ±
                               SAS NUMBER: 4921D
                                                                    D NUMBER: P239
                                                                                                                            * *
* *
                                                                                                                            * *
* *
ANALYTICAL RESULTS
                                                                   UG/KG
                                                                                       ANALYTICAL RESULTS
   UG/KG
    100 ALPHA-BHC
                                                                   100U METHOXYCHLOR
    100 BETA-BHC
                                                                    20Ŭ
                                                                         ENDRIN KETONE
    100 DELTA-BHC
                                                                         CHLORDANE (TECH. MIXTURE) /1
     100 GAMMA-BHC (LINDANE)
                                                                    1000
                                                                         GAMMA-CHLORDANE
                                                                                          /2
         HEPTACHLOR
                                                                         ALPHA CHLORDANE
     100
                                                                    1000
         ALDRIN
                                                                    2000
                                                                         TOXAPHENE
     100
                                                                         PCB-1016 (AROCLOR 1016)
     100
         HEPTACHLOR EPOXIDE
                                                                    1000
                                                                         PCB-1221 (AROCLOR 1221)
PCB-1232 (AROCLOR 1232)
     100
         ENDOSULFAN I (ALPHA)
                                                                    1000
         DIFIDRIN
     20U
                                                                    1000
                                                                   1000 PCB-1232 (AROCLOR 1232)
1000 PCB-1242 (AROCLOR 1242)
1000 PCB-1248 (AROCLOR 1248)
2000 PCB-1254 (AROCLOR 1254)
2000 PCB-1260 (AROCLOR 1260)
21 PERCENT MOISTURE
     20U 4.4'-DDE (P.P'-DDE)
     200 ENDRIN
     20U
         ENDOSULFAN II (BETA)
     20ŭ
         4.4'-DDD (P.P'-DDD)
         ENDOSULFAN SULFATE
     20ŭ
     200
         4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

10/12/89

PESTICIDES/PCB'S DATA REPORT	EFA REGION IV ESD, ATTEMS, GA.	10/12/03
*** * * * * * * * * * * * * * * * * *	E TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G C/ CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1300 D. NUMBER: P240	**
*** * * * * * * * * * * * * * * * * *	UG/KG ANALYTICAL RES	* * * * * * * * * * * * * * * * * * *
13U ALPHA-BHC 13U BETA-BHC 13U DELTA-BHC 13U DELTA-BHC 13U GAMMA-BHC (LINDANE) 13U HEPTACHLOR 13U ALDRIN 13U HEPTACHLOR EPOXIDE 13U ENDOSULFAN I (ALPHA) 27U DIELDRIN 27U DIELDRIN 27U ENDRIN 27U ENDRIN 27U ENDOSULFAN II (BETA) 27U 4,4'-DDD (P,P'-DDD) 27U ENDOSULFAN SULFATE 27U 4,4'-DDT (P,P'-DDT)	130U METHOXYCHLOR 27U ENDRIN KETONE CHLORDANE (TECH. MIXTURE) / 130U GAMMA-CHLORDANE /2 130U ALPHA-CHLORDANE /2 270U TOXAPHENE 130U PCB-1016 (AROCLOR 1016) 130U PCB-1221 (AROCLOR 1221) 130U PCB-1232 (AROCLOR 1232) 130U PCB-1242 (AROCLOR 1242) 130U PCB-1248 (AROCLOR 1248) 270U PCB-1254 (AROCLOR 1254) 270U PCB-1260 (AROCLOR 1254) 270U PCB-1260 (AROCLOR 1260) 40 PERCENT MOISTURE	1

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
*** PROJECT NO. 89-537 SAMPLE NO. 39780 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON ***
                                                                 PROG ELEM: NSF COLLECTED BY: G CARTON
    SOURCE: LATEX CONSTRUCTION
                                                                 CITY: SAVANNAH ST: GA
    STATION ID: SD-02
                                                                 COLLECTION START: 09/12/89 1335 STOP: 00/00/00
* *
                                                                                                                         * *
                                                                  D. NUMBER: P241
* *
    CASE NUMBER: 12698
                              SAS NUMBER: 4921D
                                                                                                                         **
   ANALYTICAL RESULTS
   UG/KG
                    ANALYTICAL RESULTS
                                                                 UG/KG
    30U ALPHA-BHC
                                                                 3000
                                                                       METHOXYCHLOR
    30U BETA-BHC
                                                                  59U
                                                                       ENDRIN KETONE
    300 DELTA-BHC
                                                                       CHLORDANE (TECH. MIXTURE) /1
    30U
         GAMMA-BHC (LINDANE)
                                                                       GAMMA-CHLORDANE
                                                                                       /2
/2
                                                                  3000
    300
        HEPTACHLOR
                                                                  3000
                                                                       ALPHA- CHLORDANE
    300
         ALDRIN
                                                                  590U
                                                                       TOXAPHENE
                                                                       PCB-1016 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
         HEPTACHLOR EPOXIDE
    300
                                                                  300U
         ENDOSULFAN I (ALPHA)
    300
                                                                  3000
                                                                       PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
    590
         DIELDRIN
                                                                  300U
    59U
         4.4'-DDE (P.P'-DDE)
                                                                  3000
    59U ENDRIN
                                                                  3000
                                                                 590U PCB-1254 (AROCLOR 1254)
590U PCB-1260 (AROCLOR 1260)
    59U
         ENDOSULFAN II (BETA)
    590
         4,4'-DDD (P,P'-DDD)
         ENDOSULFAN SULFATE
    59U
                                                                   73 PERCENT MOISTURE
    59U
         4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON ST: SAVANNAH ST: SAVANNAH COLLECTION START: 09/12/89 1440 STOP: 00/00/00 D: NUMBER: P242
    PROJECT NO. 89-537 SAMPLE NO. 39781 SAMPLE TYPE SOIL
     SOURCE LATEX CONSTRUCTION
                                                                                                                                44
     STATION ID: SD-03
* *
                                                                                                                                * *
                                SAS NUMBER: 4921D
     CASE NUMBER: 12698
                                                                                                                                **
* *
                                                                                                                                * *
   UG/KG
                       ANALYTICAL RESULTS
                                                                                         ANALYTICAL RESULTS
                                                                     UG/KG
     150 ALPHA-BHC
                                                                     1500 METHOXYCHLOR
     150
         BETA-BHC
                                                                      31 Ú
                                                                           ENDRIN KETONE
         DELTA-BHC
GAMMA-BHC (LINDANE)
     150
                                                                           CHLORDANE (TECH, MIXTURE) /1
     150
                                                                      1500
                                                                           GAMMA-CHLORDANE
     150
          HEPTACHLOR
                                                                      1500
                                                                           ALPHA-CUI ORDANE
     150
          ALDRIN
                                                                      3100
                                                                           TOXAPHENE
     150
          HEPTACHLOR EPOXIDE
                                                                           PCB-1016 (AROCLOR 1016)
                                                                     150U
          ENDOSULFAN I (ALPHA)
                                                                           PCB-1221 (AROCLOR 1221)
PCB-1232 (AROCLOR 1232)
     150
                                                                     1500
     31U DIFLORIN
                                                                      150U
                                                                     1500 PCB-1232 (AROCLUR 1232)
1500 PCB-1242 (AROCLOR 1242)
1500 PCB-1248 (AROCLOR 1248)
3100 PCB-1254 (AROCLOR 1254)
3100 PCB-1260 (AROCLOR 1260)
48 PERCENT MOISTURE
     310
          4.4'-DDE (P.P'-DDE)
     31U FNORTH
          ENDOSULFAN II (BETA)
     310
          4.4'-DDD (P.P'-DDD)
     3111
     310
         ENDOSULFAN SULFATE
     310
          4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\* \*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REAVALYSIS IS NECESSARY FOR VERIFICATION.

1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. \*C-CONFIRMED BY GCMS

```
PESTICIDES/PCB'S DATA REPORT
* *
* *
   UG/KG
                     ANALYTICAL RESULTS
                                                              UG/KG
                                                                                ANALYTICAL RESULTS
    13U ALPHA-BHC
                                                              130U METHOXYCHLOR
    13U BETA-BHC
13U DELTA-BHC
                                                               25Ŭ
                                                                    ENDRIN KETONE
                                                                    CHLORDANE (TECH. MIXTURE) /1
GAMMA-CHLORDANE /2
         GAMMA-BHC (LINDANE)
     130
                                                               1300
                                                                                   /2
    130
         HEPTACHLOR
                                                               1300
                                                                    ALPHA-CHLORDANE
     130
         ALDRIN
                                                               250Ŭ
                                                                    TOXAPHENE
                                                                    PCB-1016 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
     130
         HEPTACHLOR EPOXIDE
                                                               1300
         ENDOSULFAN I (ALPHA)
     130
                                                               1300
     250 DIFLORIN
                                                               1300
                                                                    PCB-1232 (AROCLOR 1232)
                                                                    PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
PCB-1254 (AROCLOR 1254)
PCB-1260 (AROCLOR 1260)
    250
250
         4,4'-DDE (P,P'-DDE)
ENDRIN
                                                               1300
                                                               1300
     25บ
         ENDOSULFAN II (BETA)
                                                               250Ŭ
     25Ŭ
         4,4'-DDD (P.P'-DDD)
                                                               250U
     250
         ENDOSULFAN SULFATE
                                                                    PERCENT MOISTURE
                                                                37
         4.4'-DDT (P.P'-DDT)
```

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

10/12/89

```
PESTICIDES/PCB'S DATA REPORT
PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA
    PROJECT NO. 89-537 SAMPLE NO. 39783 SAMPLE TYPE: SOIL
    SOURCE: LAIEX CONSTRUCTION
                                                                COLLECTION START: 09/12/89 1550 STOP: 00/00/00
    STATION ID: SD-05
                                                                                                                       * *
                              SAS NUMBER: 4921D
                                                                 D. NUMBER: P244
* *
    CASE NUMBER: 12698
                                                                                                                       **
                                                                                                                       **
UG/KG
                                                                                   ANALYTICAL RESULTS
   UG/KG
                     ANALYTICAL RESULTS
    16U ALPHA-BHC
                                                                 1600 METHOXYCHLOR
    16U BETA-BHC
                                                                 320
                                                                      ENDRIN KETONE
    16U
         DELTA-BHC
                                                                      CHLORDANE (TECH. MIXTURE) /1
                                                                      GAMMA-CHLORDANE
ALPHA-CHLORDANE
TOXAPHENE
         GAMMA-BHC (LINDANE)
    16ú
                                                                 1600
                                                                                      /2
    16U HEPTACHLOR
                                                                 1600
                                                                 3200
1600
    160
         ALDRIN
                                                                      PCB-1016 (AROCLOR 1016)
PCB-1221 (AROCLOR 1221)
    16U
         HEPTACHLOR EPOXIDE
    16U
         ENDOSULFAN I (ALPHA)
                                                                 1600
                                                                      PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
    320
         DIELDRIN
                                                                 1600
     320
         4.4'-DDE (P.P'-DDE)
                                                                 160U
     32Ŭ
         ENDRIN
                                                                 1600
                                                                 320U PCB-1254 (AROCLOR 1254)
320U PCB-1260 (AROCLOR 1260)
     32U
         ENDOSULFAN II (BETA)
         4,4'-DDD (P,P'-DDD)
ENDOSULFAN SULFATE
4,4'-DDT (P,P'-DDT)
     320
                                                                      PERCENT MOISTURE
     32U
```

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

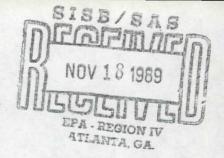
```
PESTICIDES/PCB'S DATA REPORT
PROJECT NO. 89-537 SAMPLE NO. 39784 SAMPLE TYPE: SOIL
                                                             PROG ELEM: NSF COLLECTED BY: G CARTON
                                                             CITY: SAVANNAH ST: GA
COLLECTION START: 09/12/89 1610 STOP: 00/00/00
    SOURCE: LATEX CONSTRUCTION
* *
    STATION ID: SD-06
* *
                                                                                                                  * *
                             SAS NUMBER: 4921D
    CASE NUMBER: 12698
                                                              D. NUMBER: P245
                                                                                                                  * *
**
**
                                                                                                                  * *
   UG/KG
                     ANALYTICAL RESULTS
                                                              UG/KG
                                                                               ANALYTICAL RESULTS
    17U ALPHA-BHC
                                                              170U METHOXYCHLOR
    17U BETA-BHC
                                                                   ENDRIN KETONE
                                                               330
    17U DELTA-BHC
                                                                   CHLORDANE (TECH. MIXTURE) /1
    17Ú
        GAMMA-BHC (LINDANE)
                                                              170U
                                                                   GAMMA-CHI ORDANE
                                                                   ALPHA-CHLORDANE
TOXAPHENE
    17U
        HEPTACHLOR
                                                              170U
    170
        ALDRIN
                                                              3300
    1 7 U
        HEPTACHLOR EPOXIDE
                                                              1700
                                                                   PCB-1016 (AROCLOR 1016)
    1 7U
        ENDOSULFAN I (ALPHA)
                                                              1700
                                                                   PCB-1221 (AROCLOR 1221)
                                                                   PCB-1232 (AROCLOR 1232)
PCB-1242 (AROCLOR 1242)
PCB-1248 (AROCLOR 1248)
        DIELDRIN
    330
                                                              170U
        4.4'-DDE (P.P'-DDE)
    330
                                                              170U
    330
        ENDRIN
                                                              1700
                                                                   PCB-1254 (AROCLOR 1254)
PCB-1260 (AROCLOR 1260)
    330
        ENDOSULFAN II (BETA)
                                                              3300
        4,4'-DDD (P,P'-DDD)
    330
                                                              3300
        ENDOSULFAN SULFATE
4,4'-DDT (P.P'-DDT)
    330
                                                                   PERCENT MOISTURE
    330
```

\*\*\*REMARKS\*\*\*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV COLLEGE STATION RD. ATHENS, GA. 30613

File



\*\*\*\*MEMORANDUM\*\*\*\*\*

DATE: 11/02/89

SUBJECT: Results of Metals Analysis;

89-537 LAT

LATEX CONSTRUCTION

SAVANNAH GA

CASE NO: 12698SAS NO: 49210

FROM: Robert W. Knight

Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

CC: al Horke

METALS DATA REPORT	EIA REGION IV E	ob, Amero, un.	11,01,00
** PROJECT NO. 89-537 SAMPLE NO ** SOURCE: LATEX CONSTRUCTION ** STATION ID: SS-01	* * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH SI: GA COLLECTION START: 09/11/89 1245 STOP: MD NUMBER: N367	* * * * * * * * * * * * * * * * * * *
	7 0 4 1 0 1 2 0 N 2 1	MG/KG ANALYTICAL RESULTS  4J MANGANESE 111U MERCURY 50 POTASSIUM 45U SELENTUM 44UR SILVER 990U SODIUM 45UR THALLIUM A TIN 15U VANADIUM 4 ZINC 2 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

METALS DATA	REPORT					,,, ,,, ,,
*** * * * * ** PROJEC' ** SOURCE ** STATIO	T NO. 89-537 SAMPLE : LATEX CONSTRUCTION N ID: SB-01		* * * * * * * * TYPE: SOIL	PROG ELEM: NSF CITY: SAVANNAH COLLECTION START: MD NUMBER: N368	COLLECTED BY: G CARTON SI: GA 09/11/89 1255 STOP	* * * * * * * * * * * * * * * * * * *
300 AI 0.530J AI 10 BJ 0.530 BI 0.790 CJ 880J CJ 40 CJ 40 CJ 910J II	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	16 0. 5. 15 0. 34	13U MERCURY OU NICKEL 53U SELENTUM 6UR SILVER 10U SODIUM 53UR THALLIUM TIN 5 VANADIUM ZINC	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *

\*\*\*REMARKS+++

METALS DATA REPORT	EFA-REGION IV ESD, ATTEMS, GA.	11,01789
*** * * * * * * * * * * * * * * * * * *	MPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1410 STOF	* * * * * * * * * * * * * * * * * * *
MG/KG ALUMINUM 7.80 ANIMONY 3.1J ARSENIC 58 BARIUM 0.450 HERYLLIUM 0.670 CADMIUM 3700J CALCIUM 33J CHROMIUM 8.5 COBALT 150 COPPER 12000J IRON 190 LEAD 850 MAGNESTUM	MG/KG AMALYTICAL RESULTS  88J MANGANESE  0.13 MERCURY  4.5U NICKEL  790. POTASSIUM  0.45U SFLENTUM  1.3UR SILVER  290U SODIUM  0.45UR THALLIUM  NA TIN  12 VANADIUM  410 ZINC  10 PERCENT MOISTURE	* * * * * * * * * * * * * * * * * * * *

\*\*\*REMARKS+++

METALS DATA REPORT		EFA REGION IV ESD, AT	ILIO, UA.	11/01/03
*** * * * * * * * * * * *	AMPLE NO 39771 SAMPLE	TYPE: SOIL PROC CITY COLL	# # # # # # # # # # # # # # # # # # #	CARTON ** GA ++
	YTÍCAL RESULTS	* * * * * * * * * * * * * * * * * * *		* * * * * * * * * * * * * * * * * * *

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

METALS DATA REPORT	EFA MEDION IV ESD, MINERS, OA.	11,01,69
*** * * * * * * * * * * * * * * * * * *	TYPE: SOIL PROG ELEM: NSF COLLECTED CITY: SAVANNAH COLLECTION START: 09/11/89 MD NUMBER: N371	BY: G CARTON ** ST: GA ++ 1605 STOP: 00/00/00 **
### * * * * * * * * * * * * * * * * * *		L RESULTS

\*\*\*REMARKS+++

METALS DATA REPORT	ETA REGION IT ESD, ATTENS,	, <b>u</b> n.	, ,
*** * * * * * * * * * * * * * * * * * *	TYPE: SOIL PROG ELE CITY: SA COLLECT: MD NUME	EM: NSF COLLECTED BY: G CARTON	* * * * * * * * * ** ** 00/00 ** **
MG/KG ANALYTICAL RESULTS  2000 ALUMINUM 200 ANIIMONY 8.8J ARSENTC 64 BARIUM 0.61U HERYLLIUM 5.8 CADMIUM 4900J CALCIUM 39J CHROMIUM 11 COBALT 460 COPPER 24000J IRON 95 LEAD 2400 MAGNESIUM	0.15u ME 6.1U N 1900. PG 0.61U SE 1.8UR SE 2200 SG 0.61UR TI NA TO 40 630 Z	* * * * * * * * * * * * * * * * * * *	* * * * * * * ***

\*\*\*REMARKS\*\*\*

METALS DATA REPORT	EPA-REGION IV ESD, ATHE	INS, GA.	11/01/69
*** * * * * * * * * * * * * * * * * * *	CITY: COLLE	ELEM: NSF COLLECTED BY: G CARTO SAVANNAH ST: GA ECTION START: 09/11/89 1715 STO JUMBER: N373	* * * * * * * * * * * * * * * * * * *
### # # # # # # # # # # # # # # # # #	* * * * * * * * * * * * * * * * * * *	MANGANESE MANGANESE MERCURY NICKEL POTASSIUM SFLENTUM SILVER SODIUM THALLIUM TIN VANADIUM ZINC PERCENT MOISTURE	* * * * * * * * * * * * ***

\*\*\*REMARKS+\*\*

<sup>\*\*\*</sup>FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

METALS DATA REPORT	ELA REGION IT ESD, ATTENS, GA.	11,01,00
*** * * * * * * * * * * * * * * * * * *		E * * * * * * * * * * * * * * * * * * *
MG/KG ALUMINUM 11000 ALUMINUM 10U ANTIMONY 3UJ ARSENIC 17 BARIUM 1U HERYLLIUM 2.7 CADMIUM 3700J CALCIUM 18J CHROMIUM 5.8 COBALT 48 CUPPER 9500J IRON 14 LEAD 1500 MAGNESTUM		RE

\*\*\*REMARKS\*\*\*

METALS DATA REPORT	ELA MEGION IV ESD, ATTIENS, GA		1,00
the state of the s	TYPE: SOIL PROG ELEM: I	NSF COLLECTED BY: G CARTON NAH ST: GA START: 09/12/89 0845 STOP: 00/00/00	*** ** ** ** **
MG/KG ALUMINUM 7.5U ANIIMONY 3J ARSENIC 100 BARIUM 2.8 BERYLLIUM 14 CADMIUM 8600J CALCIUM 97J CHROMIUM 30 COBALT 1700 COPPER 36000J IRON 1500 LEAD 1300 MAGNESIUM	MG/KG 560J MANGAI 1.2 MERCU 230 NICKE 990 POTAS 0.43U SELEN 1.3UR SILVEI 510 SODIUI 0.43UR THALL NA TIN 16 VANAD 2600 ZINC 06 PERCEI	RÝ SIUM TUM R M IUM	***

\*\*\*REMARKS\*\*\*

ME!ALS DATA REPORT		EIA REGION IV ESD, ATT		11/01/65
** PROJECT NO. 89-537 ** SOURCE: LATEX CONS ** STATION ID: SS-06 ** CASE NUMBER: 12698	TRUCTION	TYPE: SOIL PROG CITY COLL	ELEM: NSF COLLECTED BY: 6 - SAVANNAH ST: ECTION START: 09/12/89 0950 NUMBER: Q238	GA ++
### # # # # # # # # # # # # # # # # #	* * * * * * * * * * * * * * * * * * *	MG/KG 270J 0.11-U 190: 1000 0.45U 1.3UR 490 0.45UR NA 18. 2140	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *

\*\*\*REMARKS\*\*\*

ME!ALS DAT	TA REPORT									
*** * * *	* * * * * * *	* * * * * *	* * * * * *	* * * * * * *	:	* * * * 4		* * * * * * * *	* * * * * * *	* * * * **
	CT NO. 89-537		NO. 39778	SAMPLE TYPE	SOIL	PROG		ECTED BY: G CART	ON	**
	OF: LATEX CONS ION ID: SB-05	IRUCITON					: SAVANNAH ECTION START. 09/	ST: GA 12/89 1005 ST	OP: 00/00/00	**
** CASE	NUMBER: 12698	SI	AS NUMBER:	49210		MD	NUMBER: Q239	12/69 1005 31	OF, HOYGOYGO	**
44	HOMBERT. TEOSO	5,	45 NOMBER.	10210		1116-1				**
*** * * *	* * * * * * *	* * * * * *		* * * * * *	* * * *	* * * * *		* * * * * * *	* * * * * * *	* * * * ***
MG/KG	A	ANALYTICAL	RESULTS			MG/KG		LYTICAL RESULTS		
	ALUMINUM					ຮວງີ	MANGANESE MERCURY			
9.10 14J	ANTIMONY ARSENTO					0,18 200	NICKEL			
14	BARIUM					110 :	POTASSIUM			
Q. 520	BERYLLIUM					10	SELENTUM			
2.6	CADMIUM					1.6UR	SILVER			
<b>9</b> 3001	CALCIUM					350	SODIUM			
13J 3.1U	CHROMIUM					0.52UR	THALLIUM TIN			
200	COBALT COPPER					NA 10	VANADIUM			
6400J	IRON					19 21 23	ZINC			
17	LEAD					23	PERCENT MOISTUR	RE		
960	MAGNESTUM									

\*\*\*REMARKS\*\*\*

ME!ALS DATA REPORT	EFA-REGION IV ESD, ATTIENS, GA.	11/01/69
_ 444		, , , , , , , , , , , , , , , , ,
MG/KG ANALYTICAL RESULTS  10000 ALUMINUM 20U ANTIMONY 3.9J ARSENIC 13 BARIUM 0.65U HERYLLIUM 0.98U CADMIUM 6400J CALCIUM 19J CHROMTUM 3.9U COBALT 30U COPPER 10000J IRON 10 LEAD 1900 MAGNESTUM	MG/KG ANALYTICAL RESULTS 76J MANGANESE 0.16U MERCURY 20U NICKEL 750 POTASSIUM 0.65U SELENTUM 2UR SILVER 4300 SODIUM 0.65UR THALLIUM NA TIN 27 VANADIUM 32 ZINC 39 PERCENT MOISTURE	* * * * * * * * * * ***

\*\*=REMARKS+++

\*\*\*FOOTNOTES\*\*\*

METALS DATA RE	PORT		2	202,,.2.	,		1,01,00
**	X X X X X X X X X X X X X X X X X X X	* * * * * * * * * * * * * * * * * * *	* * * * * * * TYPE: SOIL	CITÝ: COLLEC	ELEM: NSF COLL SAVANNAH CTION START: 09/ JMBER: Q241	ECTED BY: G CARTON SY: GA 12/89 1335 STOP	* * * * * * * * * * * * * * * * * * *
14 CĀDM 3400J CALC 78J CHRO 21 COBA 34 COPP 41000J IRON 34 LEAD	INUM MONY NIC UM LLIUM IUM IUM MIUM LT ER	L RESULTS	* * * * * *	* * * * * * * MG/KG 310J 0.37U 60U 4200 1.5U. 4.4UR 22000 1.5UR NA. 110 97	* * * * * * * * * * * * * * * * * * *	LÝTÍCÁL RĚSÚLŤS	* * * * * * * * * * * ***

\*\*\*REMARKS+++

METALS DATA REPORT	EPA-REGION IV ESD, ATTEMS	, dA. 1:/01/69
*** * * * * * * * * * * * * * * * * * *		* * * * * * * * * * * * * * * * * * *
MG/KG  2200  ALUMINUM OU ANI IMONY 2UJ ARSENTC 6.5U BARIUM 0.52U HERYLLIUM 0.78U CADMIUM 7/000J CALCIUM 4.6J CHROMTUM 3.1U COBALT 4Ü CUPPER 2200J IRON 3.9 LEAD 590 MAGNESIUM	0.130 M 5.20 N 240.: Pt 0.520 S 1.60R S 2000 S 0.520R T NA T 8.6 V 50 Z	ANGANESE ANALYTICAL RESULTS ANGANESE ERCURY ICKEL OTASSIUM ELENTUM ILVER ODIUM HALLIUM IN ANADIUM IN ENDER HOUSTURE ERCENT MOISTURE

\*\*\*REMARKS\*\*\*

METALS DATA REPORT	ELA REGION IV ESD, ATTENS, GA.	. 1, 0 1, 00
_ 4.4		* * * * * * * * * * * * * * * * * * *
MG/KG ANALYTICAL RESULTS  23000 ALUMINUM 200 AN'! IMONY 5.5J ARSENIC 28 BARIUM 10 HERYLLIUM 0.96U CADMIUM 10000J CALCIUM 33J CHROMIUM 8.9 COBALT 6.3 COPPER 19000J IRON 9.9 LEAD 4600 MAGNESIUM		* * * * * * * * * * * * * * * * * * *

\*\*\*REMARKS+++

METALS DATA REPORT	2.77 11202011 27 202, 771112		., ,
- #44 4 4 4 7 7 7 7 8 8 7 7 7 7 7 7 7 7 7 7	* * * * * * * * * * * *		* * * * * * * * * * * * * * * * * * * *
	E TYPE: SOIL PROG	ELEM: NSF COLLECTED BY: G CARTON	
** SOURCE: LATEX CONSTRUCTION  ** STATION ID: SD-05		SAVANNAH ST: GA CTION START: 09/12/89 1550 STOP	: 00/00/00
** CASE NUMBER: 12698 SAS NUMBER: 4921D	MD N	UMBER: Q244	**
**			**
*** * * * * * * * * * * * * * * * * *	* * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * *
MG/KG ANALYTICAL RESULTS 26000 ALUMINUM	MG/KG 1700	ANALYTICAL RESULTS MANGANESE	
13U ANTIMONY	0,190	MERCURY	
7.9J ARSENIC	74	NICKEL	
100 BARIUM 2.5 MERYLLIUM	3600. 0.740	POTASSIUM SELENTUM	
17 CADMIUM	2.20R	SILVER	
3400J CALCIUM	12000	SÖDIÜM	
54J CHROMTUM	0,74UR	THALLIUM TIN	
14 COBALT 410 COPPER	NA 56	VANADIUM	
27000J IRON	940	ZINC	
510 LEAD	46	PERCENT MOISTURE	
3700 MAGNESTUM		•	

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

METALS DATA REPORT	EPA-REGION IV E	ISD, ATTENS, GA.	11/01/69
** PROJECT NO. 89-537 SAMPLE NO. 39 ** SOURCE: LATEX CONSTRUCTION ** STATION ID: SD-06	* * * * * * * * * * * * * * * * * * *	PROG ELEM: NSF COLLECTED BY: G CARTOL ST: GA COLLECTION START: 09/12/89 1610 STOLEMD NUMBER: Q245	* * * * * * * * * * * * * * * * * * *
MG/KG 23000 ALUMINUM 30U ANTIMONY 0.82UJ ARSENIC 23 BARIUM 10 HERYLLIUM 13 CADMIUM 9400J CALCIUM 30J CHROMIUM 13 COBALT 29 CUPPER 19000J IRON 44 LEAD 3800 MAGNESIUM		MG/KG  MANGANESE  D. 21U MERCURY  D. 21U MERCURY  D. 82U SELENIUM  D. 82U SELENIUM  D. 82U SOU SOU SOUN  D. 82U SELVER  D. 82U SOU SOUN  D. 82UR THALLIUM  NA TIN  DO VANADIUM  D. 82 THC  TINC  TO VANADIUM  TINC  TO PERCENT MOISTURE	* * * * * * * * * * * *

\*\*\*REMARKS\*\*\*

\*\*\*REMARKS+++

\*\*\*FOOTNOTES\*\*\* \*FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

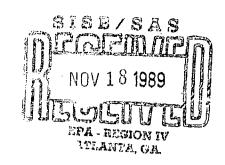
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV COLLEGE STATION RD. ATHENS, GA. 30613



\*\*\*\*MEMORANDUM\*\*\*\*\*

DATE: 11/02/89

SUBJECT:

Results of Cyanide Analysis; 89-537 LATEX CONSTRUCTION

SAVANNAH GA CASE NO: 12698SAS NO: 4921D

FROM: Robert W. Knight

Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

**ATTACHMENT** 

11/01/89

> RESULTS UNITS PARAMETER 1.10 MG/KG CYANIDE

11/01/89

\* \* \*\*

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

PROJECT NO. 89-537 SAMPLE NO. 39769 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SB-01 CASE.NO.: 12698 SAS NO.: 4921D

PROG FLEM: NSF COLLECTED BY: G CARTON

44

\*\*

CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1255 STOP: 00/00/00 D. NO.: N368 MD NO: N368

RESULTS UNITS PARAMETER 1.3U MG/KG CYANIDE

11/01/89

\* \*

\*\*

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39770 SAMPLE TYPE. SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SS-02 CASE.NO.: 12698 SAS NO.: 4921D

PROG ELFM: NSF COLLECTED BY: G CARTON

PROG ELEM: NSF CULLECTED BT. GONNO.
CITY: SAVANNAH ST: GA
COLLECTION START: 09/11/89 1410 STOP: 00/00/00
PNO: N369 MD NO: N369

\*\* \*\*

**\*** \*

\* \*

RESULTS UNITS PARAMETER 1.10 MG/KG CYANIDE

11/01/89

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

\* \* \* \*

\*\*

\*\*

PROJECT NO. 89-537 SAMPLE NO. 39771 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SB-02 CASE.NO.: 12698 SAS NO.: 4921D

PROG FLEM: NSF COLLECTED BY: G CARTON

CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1445 STOP: 00/00/00 D. NO.: N370 MD NO: N370

D. NO.: N370

\*\* \*\* 

RESULTS UNITS PARAMETER 1.70 MG/KG CYANIDE

11/01/89

> RESULTS UNITS PARAMETER 1.1U MG/KG CYANIDE

11/01/89

\*\* \* \*

SPECIFIED ANALYSIS DATA REPORT

\* \*

PROJECT NO. 89-537 SAMPLE NO. 39773 SAMPLE TYPE: SOIL PROG FLEM: NSF COLLECTED BY: G CARTON

SOURCE: LATEX CONSTRUCTION STATION ID: SB-03 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1615 STOP: 00/00/00 D. NO.: N372 MD NO: N372 SAS NO.: 4921D \*\*

\*\* \* \* \*\* 

RESULTS UNITS PARAMETER 1.50 MG/KG CYANIDE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

11/01/89

SPECIFIED ANALYSIS DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39774 SAMPLE TYPE: SOIL PROG FIEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: SS-04 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1715 STOP: 00/00/00 D. NO.: N373 MD NO: N373 \* \* \*\* \*\* SAS NO.: 4921D \*\* \*\* \*\* \*\* 

RESULTS UNITS PARAMETER 1.20 MG/KG CYANIDE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

11/01/89

> RESULTS UNITS PARAMETER 1.40 MG/KG CYANIDE

11/01/89

> RESULTS UNITS PARAMETER 1.10 MG/KG CYANIDE

11/01/89

RESULTS UNITS PARAMETER 1.10 MG/KG CYANIDE

11/01/89

SPECIFIED ANALYSTS DATA REPUR!

\*\*\* PROJECT NO. 89-537 | SAMPLE NO. 39778 SAMPLE TYPE: SOIL

\*\* SOURCE: LATEX CONSTRUCTION

\*\* STATION ID: SB-05

\*\* CASE. NO.: 12698 | SAS NO.: 4921D | SAS NO.:

RESULTS UNITS PARAMETER 1.3U MG/KG CYANIDE

11/01/89

RESULTS UNITS PARAMETER 1.6U MG/KG CYANIDE

11/01/89

RESULTS UNITS PARAMETER 3.7U MG/KG CYANIDE

11/01/89

SPECIFIED ANALYSTS DATA REPORT

\*\*\* PROJECT NO. 89-537 | SAMPLE NO. 39781 SAMPLE TYPE: SOIL

\*\* SOURCE: LATEX CONSTRUCTION

\*\* STATION ID: SD-03

\*\* CASE.NO.: 12698 | SAS NO.: 4921D | SAS NO.:

RESULTS UNITS PARAMETER 1.8U MG/KG CYANIDE

11/01/89

> RESULTS UNITS PARAMETER 1.6U MG/KG CYANIDE

11/01/89

SPECIFIED ANALYSIS DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39783 SAMPLE TYPE: SOIL PROG FILEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: SD-05 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1550 STOP: 00/00/00 D. NO.: P244 MD NO: Q244 \* \* \*\* \*\* \*\* SAS NO.: 4921D \* \* \*\* \*\* \*\* 

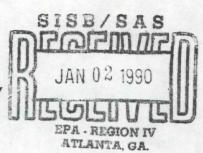
> RESULTS UNITS PARAMETER 1.90 MG/KG CYANIDE

RESULTS UNITS PARAMETER 2.10 MG/KG CYANIDE

3 (BARA) 171

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV COLLEGE STATION RD. ATHENS, GA. 30613



\*\*\*\*MEMORANDUM\*\*\*\*\*

DATE: 12/14/89

SUBJECT: Results of Specified Analysis;

89-537 LATEX CONSTRUCTION SAVANNAH GA

CASE NO: 12698SAS NO: 4921D

FROM: Robert W. Knight

Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

Attached are the results of analysis of samples collected as part of the subject project.

If you have any questions please contact me.

ATTACHMENT

CC: Hanke

12/13/89

PROJECT NO. 89-537 SAMPLE NO. 39787 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: LC-SS-01 CASE.NO.: 12698 SAS NO.: 4921D PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA STOP: 00/00/00 CITY: SAVANNAH \* \* COLLECTION START: 09/11/89 \*\* \* \* MD NO: \*\* D. NO.: 01 \* \* \* \* \*\* 

RESULTS UNITS PARAMETER
26UJ UG/KG MONOBUTYL TIN
26U UG/KG DIBUTYL TIN
26U UG/KG TRIBUTYL TIN
26UR UG/KG MONOPHENYL TIN
26UJ UG/KG DIPHENYL TIN
26UJ UG/KG TRIPHENYL TIN
26U UG/KG TRIPHENYL TIN
4.2UJ MG/KG TIN
24 % MOISTURE

SPECIFIED ANALYSIS DATA REPORT

12/13/89

PROJECT NO. 89-537 SAMPLE NO. 39788 SAMPLE TYPE: SOIL PROG FLEM: NSF COLLECTED BY: G CARTON SOURCE. LATEX CONSTRUCTION STATION ID: LC-SB-01 CASE.NO.: 12698 SA ST: GA CITY: SAVANNAH \* \* \*\* COLLECTION START: 09/11/89 STOP: 00/00/00 \*\* \*\* \*\* SAS NO.: 4921D D. NO.: SB01 MD NO: \*\* \*\* \*\* 

RESULTS UNITS PARAMETER
25UJ UG/KG MONOBUTYL TIN
25U UG/KG DIBUTYL TIN
25UR UG/KG TRIBUTYL TIN
25UR UG/KG MONOPHENYL TIN
25UJ UG/KG DIPHENYL TIN
25U UG/KG TRIPHENYL TIN
6UJ MG/KG TIN
19 % MOISTURE

SPECIFIED ANALYSIS DATA REPORT

12/13/89

SPECIFIED ANALYSIS DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39789 SAMPLE TYPE: SOIL SOURCE, LATEX CONSTRUCTION STATION ID: LC-SS-02 CASE.NO.: 12698 SAS NO.: 4921D PROG ELEM- NSF COLLECTED BY: G CARTON \* \* CITY: SAVANNAH ST: GA \* \* COLLECTION START: 09/11/89 STOP: 00/00/00 \*\* \*\* \* \* D. NO.: SSO2 \* \* \*\* \*\* 

RESULTS UNITS PARAMETER
99JC UG/KG MONOBUTYL TIN
310C UG/KG DIBUTYL TIN
410JC UG/KG TRIBUTYL TIN
22UR UG/KG MONOPHENYL TIN
22UJ UG/KG DIPHENYL TIN
22U UG/KG TRIPHENYL TIN
11J MG/KG TIN
11 % MOISTURE

12/13/89

\*\*

\* \*

\* \*

\*\*

SPECIFIED ANALYSTS DATA REPORT 

PROJECT NO. 89-537 SAMPLE NO. 39790 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION

PROG FIFM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 STOP: 00/00/00

STATION ID: LC-SB-02

CASE.NO.: 12698

\* \*

\*\*

\*\*

SAS NO.: 4921D

COLLECTION START: 09/11/89 D. NO.: SB02

RESULTS UNITS PARAMETER 30UJ UG/KG MONOBUTYL TIN 30U UG/KG DIBUTYL TIN

35N UG/KG TRIBUTYL TIN 30UR UG/KG MONOPHENYL TIN

30UJ UG/KG DIPHENYL TIN 30U UG/KG TRIPHENYL TIN 6UJ MG/KG TIN

% MOISTURE 35 %

12/13/89

\* \*

\*\*

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

\*\*

\*\*

\*\*

PROJECT NO. 89-537 SAMPLE NO. 39791 SAMPLE TYPE: SOIL SOURCE. LATEX CONSTRUCTION STATION ID: LC-SS-03 CASE.NO.: 12698 SAS NO.: 4921D

PROG ELEM: NSF COLLECTED BY: G CARTON

CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 STOP: 00/00/00

D. NO.: SS03

RESULTS UNITS PARAMETER 44JC UG/KG MONOBUTYL TIN 1700 UG/KG DJBUTYL TIN 370C UG/KG TRIBUTYL TIN 22UR UG/KG MONOPHENYL TIN 22UJ UG/KG DIPHENYL TIN 22U UG/KG TRIPHENYL TIN 5.30J MG/KG TIN 10 % % MOI % MOISTURE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

12/13/89

\*\*

\*\*

\*\*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

PROJECT NO. 89-537 SAMPLE NO. 39792 SAMPLE TYPE: SOIL

PROG ELEM- NSF COLLECTED BY: G CARTON ST: GA

SOURCE. LATEX CONSTRUCTION STATION ID: LC-SB-03

CITY: SAVANNAH

COLLECTION START: 09/11/89 STOP: 00/00/00

CASE. NO.: 12698

\*\*

\*\*

\*\*

SAS NO.: 4921D

D. NO.: SB03

RESULTS UNITS PARAMETER
93JC UG/KG MONOBUTYL TIN
930C UG/KG DIBUTYL TIN
970C UG/KG TRIBUTYL TIN 31UR UG/KG MONOPHENYL TIN 31UJ UG/KG DIPHENYL TIN 31U UG/KG TRIPHENYL TIN 35J MG/KG TIN 35 % MOISTURE

12/13/89

SPECIFIED ANALYSTS DATA REPORT PROJECT NO. 89-537; SAMPLE NO. 39793 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE. LATEX CONSTRUCTION STATION ID: LC-SS-04 CASE.NO.: 12698 SA ST: GA STOP: 00/00/00 ## CITY: SAVANNAH \*\* COLLECTION START: 09/11/89 \*\* \* \* MD NO: \*\* SAS NO.: 4921D D. NO.: SS04 \*\* \*\* \*\* 

RESULTS UNITS PARAMETER
27UJ UC/KG MONOBUTYL TIN
33N UG/KG DIBUTYL TIN
35N UG/KG TRIBUTYL TIN
27UR UG/KG MONOPHENYL TIN
27UJ UG/KG DIPHENYL TIN
27U UG/KG TRIPHENYL TIN
7.9UJ MG/KG TIN
25 % MOISTURE

12/13/89

SPECIFIED ANALYSTS DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39794 SAMPLE TYPE: SOIL PROG FIFM: NSF COLLECTED BY: G CARTON SOURCE. LATEX CONSTRUCTION STATION ID: LC-SB-04 CITY: SAVANNAH = = ST: GA \*\* CITY: SAVANNAH COLLECTION START: 09/11/89 STOP: 00/00/00 \*\* \* \* D. NO.: SB04 MD NO: \*\* CASE.NO.: 12698 SAS NO.: 4921D \* \* \*\* \*\*

RESULTS UNITS PARAMETER
26UJ UG/KG MONOBUTYL TIN
26U UG/KG DIBUTYL TIN
31N UG/KG TRIBUTYL TIN
26UR UG/KG MONOPHENYL TIN
26UJ UG/KG DIPHENYL TIN
26U UG/KG TRIPHENYL TIN
19J MG/KG TRIPHENYL TIN
19J MG/KG TIN
25 % MOISTURE

12/13/89

PROJECT NO. 89-537 SAMPLE NO. 39795 SAMPLE TYPE: SOIL PROG FLEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: LC-SS-06 CASE.NO.: 12698 \* \* CITY: SAVANNAH ST: GA \* \* \*\* COLLECTION START: 09/11/89 STOP: 00/00/00 \* \* \*\* SAS NO.: 4921D D. NO.: SS06 MD NO: \* \* \*\* 

RESULTS UNITS PARAMETER
32JC UG/KG MONOBUTYL TIN
81C UG/KG DIBUTYL !IN
93C UG/KG TRIBUTYL TIN
21UR UG/KG MONOPHENYL TIN
21UJ UG/KG DIPHENYL TIN
21U UG/KG TRIPHENYL TIN
180J MG/KG TRIPHENYL TIN
180J MG/KG TIN
7 % MOISTURE

SPECIFIED ANALYSTS DATA REPORT

12/13/89

SPECIFIED ANALYSIS DATA REPORT PROJECT NO. 89-537 . SAMPLE NO. 39796 SAMPLE TYPE: SOIL PROG ELFM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: LC-SB-05 CITY: SAVANNAH ST: GA \*\* COLLECTION START: 09/11/89 D. NO.: SB05 \* \* STOP: 00/00/00 \*\* \* \* CASE NO.: 12698 \*\* SAS NO.: 4921D \*\* \*\*

RESULTS UNITS PARAMETER
25UJ UG/KG MONOBUTYL TIN
25U UG/KG DIBUTYL TIN
40N UG/KG TRIBUTYL TIN
25UR UG/KG MONOPHENYL TIN
25UJ UG/KG DIPHENYL TIN
25UJ UG/KG TRIPHENYL TIN
8.4UJ MG/KG TIN
20 % MOISTURE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERÂGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

12/13/89

\*\*

\*\*

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

PROJECT NO. 89-537 SAMPLE NO. 39797 SAMPLE TYPE: SOIL

PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA

SOURCE. LATEX CONSTRUCTION STATION ID: LC-SD-01

CITY: SAVANNAH COLLECTION START: 09/11/89

STOP: 00/00/00

CASE.NO.: 12698

\* \*

\*\*

\*\*

SAS NO.: 4921D

D. NO.: SD01

MD NO:

RESULTS UNITS PARAMETER 30UJ UG/KG MONOBUTYL TIN 300 UG/KG DIBUTYL TIN 32N UG/KG TRIBUTYL TIN 30UR UG/KG MONOPHENYL TIN 30UJ UG/KG DIPHENYL TIN 300 UG/KG TRIPHENYL TIN 33 % % MOISTURE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

12/13/89

\* \*

\*\*

\* \*

\* \*

SPECIFIED ANALYSIS DATA REPORT 

PROJECT NO. 89-537. SAMPLE NO. 39798 SAMPLE TYPE: SOIL

PROG FIFM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH

ST: GA

SCURCE: LATEX CONSTRUCTION STATION ID: LC-SD-02 CASE.NO.: 12698

COLLECTION START: 09/11/89

STOP: 00/00/00

\* \*

\* \*

\*\*

SAS NO.: 4921D

D. NO.: SD02

RESULTS UNITS PARAMETER 65UJ UG/KG MONOBUTYL TIN 650 UG/KG DIBUTYL TIN 650 UG/KG TRIBUTYL TIN 65UR UG/KG MONOPHENYL TIN 65UJ UG/KG DIPHENYL TIN 650 UG/KG TRIPHENYL TIN 16UJ MG/KG TIN 70 % % MC % MOISTURE

12/13/89

\*\*

\*\*

\*\*

\*\*

SPECIFIED ANALYSIS DATA REPORT \*

PROJECT NO. 89-537 SAMPLE NO. 39799 SAMPLE TYPE, SOIL

PROG ELEM: NSF COLLECTED BY: G CARTON ST: GA

SOURCE: LATEX CONSTRUCTION STATION ID: LC-SD-03

CITY: SAVANNAH COLLECTION START: 09/11/89

STOP: 00/00/00

CASE.NO.: 12698

**\*** \*

\* \*

\* \*

SAS NO.: 4921D

D. NO.: SD03

MD NO:

RESULTS UNITS PARAMETER 26UJ UG/KG MONOBUTYL TIN 26U UG/KG TRIBUTYL TIN 26UR UG/KG MONOPHENYL TIN 26UJ UG/KG DIPHENYL TIN 26U UG/KG TRIPHENYL TIN 6.7UJ MG/KG TIN 22 % % MOISTURE

12/13/89

\* \*

\* \*

\* \*

\*\*

SPECIFIED ANALYSIS DATA REPORT 

CASE.NO.: 12698

\*\*

\*\*

\*\*

PROJECT NO. 89-537 SAMPLE NO. 39800 SAMPLE TYPE, SGIL

PROG ELEM: NSF COLLECTED BY: G CARTON

STOP: 00/00/00

SOURCE: LATEX CONSTRUCTION STATION ID: LC-SD-04

SAS NO.: 4921D

COLLECTION START: 09/11/89 D. NO.: SD04

CITY: SAVANNAH

MD NO:

RESULTS UNITS PARAMETER 32UJ UG/KG MONOBUTYL TIN
32U UG/KG DIBUTYL TIN
80U UG/KG TRIBUTYL TIN
32UR UG/KG MONOPHENYL TIN 32UJ UG/KG DIPHENYL TIN 32U UG/KG TRIPHENYL TIN 110J MG/KG TIN 38 % % MC % MOISTURE

\*\*\*FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL \*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN \*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

12/13/89

PROJECT NO. 89-537 SAMPLE NO. 39801 SAMPLE TYPE: SOIL PROG ELEM- NSF COLLECTED BY: G CARTON ST: GĀ STOP: 00/00/00 SOURCE: LATEX CONSTRUCTION STATION ID: LC-SD-05 CASE.NO.: 12698 CITY: SAVANNAH \* \* COLLECTION START: 09/11/89 \*\* \*\* \*\* SAS NO.: 4921D D. NO.: SD05 \*\* \*\* \*\* 

RESULTS UNITS PARAMETER
38UJ UG/KG MONOBUTYL TIN
2700 UG/KG DIBUTYL TIN
6200 UG/KG TRIBUTYL TIN
38UR UG/KG MONOPHENYL TIN
38UJ UG/KG DIPHENYL TIN
38U UG/KG TRIPHENYL TIN
90.1 MG/KG TIN
48 % % MOISTURE

SPECIFIED ANALYSTS DATA REPORT

12/13/89

PROJECT NO. 89-537 / SAMPLE NO. 39802 SAMPLE TYPE: SOIL PROG FIFM: NSF COLLECTED BY: G CARTON SOURCE. LATEX CONSTRUCTION STATION ID: LC-SD-06 CITY: SAVANNAH \* \* COLLECTION START: 09/11/89 D. NO.: SD06 STOP. 00/00/00 \*\* \*\* CASE. NO.: 12698 \*\* SAS NO.: 4921D \*\* \* \* \*\* 

RESULTS UNITS PARAMETER
41UJ UG/KG MONOBUTYL TIN
1300 UG/KG DIBUTYL TIN
41UR UG/KG TRIBUTYL TIN
41UR UG/KG MONOPHENYL TIN
41UJ UG/KG DIPHENYL TIN
41UJ UG/KG TRIPHENYL TIN
13UJ MG/KG TIN
52 % MOISTURE

SPECIFIED ANALYSTS DATA REPORT

\*\*\*FOOTNOTES\*\*\*

\*A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

```
UG/KG
                  ANALYTICAL RESULTS
                                                                                   UG/KG ANALYTICAL RESULTS
                                                                                    1800UJ 3-NITROANILINE
370U ACENAPHTHENE
     370U PHENOL
     370U BIS(2-CHLOROETHYL) ETHER
370U 2-CHLOROPHENOL
                                                                                     1800U 2.4-DINITROPHENOL
     3700 2-CHLONGHANDE

3700 1,3-DICHLOROBENZENE

3700 1,4-DICHLOROBENZENE

3700 BENZYL ALCOHOL

3700 1,2-DICHLOROBENZENE

3700 2-METHYLPHENOL
                                                                                    1800UJ 4-NITROPHENOL
                                                                                      370U DIBENZOFURAN
370U 2.4-DINITROTOLUENE
370U DIETHYL PHTHALATE
370U 4-CHLOROPHENYL PHENYL ETHER
    370UJ BIS(2-CHLOROISOPROPYL) ETHER
                                                                                      3700 FLUORENE
     3700 (3-AND/OR 4-) METHYLPHENOL
                                                                                    1800UJ 4-NITROANILINE
    370UJ N-NITROSODI-N-PROPYLAMINE
                                                                                      8000 2-METHYL-4,6-DINITROPHENOL
3700 N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
                                                                                     18000
     370U HEXACHLOROETHANE
                                                                                             4-BROMOPHENYL PHENYL ETHER HEXACHLOROBENZENE (HCB)
     370U NITROBENZENE
                                                                                       370U
     370U ISOPHORONE
                                                                                       370U
     370U 2-NITROPHENOL
                                                                                             PENTACHLOROPHENOL
                                                                                      1800U
     370U 2,4-DIMETHYLPHENOL
                                                                                             PHENANTHRENE
                                                                                      370U
   1800UJ BENZOIC ACID
                                                                                       370U
                                                                                             ANTHRACENE
     3700 BIS(2-CHLOROETHOXY) METHANE
                                                                                             DI-N-BUTYLPHTHALATE
                                                                                       3700
    370U 2,4-DICHLOROPHENOL

370U 1,2,4-TRICHLOROBENZENE

370U NAPHTHALENE

370U 4-CHLOROANILINE

370U HEXACHLOROBUTADIENE
                                                                                      370U
                                                                                             FLUORANTHENE
                                                                                             PYRENE
                                                                                       370U
                                                                                             BENZYL BUTYL PHTHALATE
3.3'-DICHLOROBENZIDINE
BENZO(A)ANTHRACENE
CHRYSENE
                                                                                       3700
                                                                                      750ÚJ
                                                                                       3700
     370U 4-CHLORO-3-METHYLPHENOL
                                                                                       370ŭ
    370U 2-METHYLNAPHTHALENE
370UJ HEXACHLOROCYCLOPENTADIENE (HCCP)
370U 2,4,6-TRICHLOROPHENOL
1800U 2,4,5-TRICHLOROPHENOL
                                                                                             BIS(2-ETHYLHEXYL) PHTHALATE
DI-N-OCTYLPHTHALATE
BENZO(B AND/OR K)FLUORANTHENE
                                                                                       370U
                                                                                       3.70U
                                                                                      3700
                                                                                       3700
                                                                                              BENZO-A-PYRENE
                                                                                         7OU INDENO (1,2,3-CD) PYRENE
7OU DIBENZO(A,H)ANTHRACENE
7OU BENZO(GHI)PERYLENE
12 PERCENT MOISTURE
     370U 2-CHLORONAPHTHALENE
                                                                                       370U
     18000
            2-NITROANILINE
                                                                                       370U
     370U DIMETHYL PHTHALATE
370U ACENAPHTHYLENE
                                                                                       370U
      370U 2.6-DINITROTOLUENE
```

\*\*\*REMARKS\*\*\*

EVEDACEADI	E ODCANIOS DATA DEDODE	EPA-REGION IV ESD, AIRL	.NS, GA.	10/12/69
*** * * * *  ** PROJE  ** SOURCE  ** STAT:	LE ORGANICS DATA REPORT  * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	ELEM: NSF COLLECTED BY: G CARTO SAVANNAH ST: GA CCTION START: 09/11/89 1255 STO	* * * * * * * * * * * * * * * * * * *
** CASE I *** * * UG/KG	NO.: 12698 SAS N * * * * * * * * * * * * * * * * * * *	O.: 4921D D. N * * * * * * * * * * * * * * * * * * *	NO.: N368 * * * * * * * * * * * * * * * * * * *	** * * * * * * * * * ***
440U 440U	NO.: 12698  * * * * * * * * * * * * * * * * * * *	2100UJ 440U 2100U 2100U 2100U 440U 440U 440U 2100U 2100U 440U	3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 2-METHYL-4,6-DINITROPHENOL N-NITROSODIPHENYLAMINE/DIPHENYL 4-BROMOPHENYL PHENYL ETHER HEXACHLOROBENZENE (HCB) PENTACHLOROPHENOL PHENANTHRENE ANTHRACENE DI-N-BUTYLPHTHALATE FLUORANTHENE PYRENE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZO(A)ANTHRACENE CHRYSENE BIS(2-ETHYLHEXYL) PHTHALATE DI-N-OCTYLPHTHALATE BENZO(B AND/OR K)FLUORANTHENE BENZO(A-PYRENE INDENO (1,2,3-CD) PYRENE DIBENZO(GHI)PERYLENE PERCENT MOISTURE	AMINE

\*\*\*REMARKS\*\*\*

EVIDACTABLE OF	DOANICO DATA DEDODI	EPA-REGION IV ESD, ATHE	.NS, GM.	10/12/69
*** * * * * *  ** PROJECT I  ** SOURCE: I  ** STATION	RGANICS DATA REPORT  * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	ELEM: NSF COLLECTED BY: G CARTO SAVANNAH ST: GA ECTION START: 09/11/89 1410 STO	* * * * * * * * * * * * * * * * * * *
** CASE NO.: *** * * * * UG/KG	12698	5AS NO.: 4921D D. 1 * * * * * * * * * * * * * UG/KG	NO.: N369 * * * * * * * * * * * * * * * * * * ANALYTICAL RESULTS	** * * * * * * * * * * * * * * * * * * *
370U PHE 370U 2-C 370U 1,3 370U 1,4 370U 1,4 370U 1,4 370U 8EN 370U 2-M 370U 8IS 370U N-N 370U JES 370U JES 370U 2-M 370U 2-M 370U 2-M 370U 2,4 1800UJ BEN 370U 370U 2,4 1800UJ 4-C 370U 2,4 370U 2,4 370U 2,4 370U 2,4 370U 2,4 370U 2,4 370U 2,4 370U 2,4 370U 2,4	LATEX CONSTRUCTION ID: SS-02  12698  * * * * * * * * * * * * * * * * * * *	1800UJ 370U 1800UJ 370U 370U 370U 370U 370U 1800U 1800U 370U 370U 370U 370U 370U 180OU 370U 370U 370U 370U 370U 370U 370U 370	3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 2-METHYL-4,6-DINITROPHENOL N-NITROSODIPHENYLAMINE/DIPHENYL 4-BROMOPHENYL PHENYL ETHER HEXACHLOROBENZENE (HCB) PENTACHLOROPHENOL PHENANTHRENE ANTHRACENE DI-N-BUTYLPHTHALATE FLUORANTHENE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZO(A)ANTHRACENE CHRYSENE BIS(2-ETHYLHEXYL) PHTHALATE DI-N-OCTYLPHTHALATE BENZO(B AND/OR K)FLUORANTHENE BENZO(A)ANTHRACENE INDENO (1,2,3-CD) PYRENE DIBENZO(A,H)ANTHRACENE BENZO(GHI)PERYLENE PERCENT MOISTURE	AMINE

\*\*\*REMARKS\*\*\*

```
PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1445 STOP: 00/00/00
      SOURCE: LATEX CONSTRUCTION
* *
      STATION ID: SB-02
                                                                                                                                                      **
* *
UG/KG
               ANALYTICAL RESULTS
                                                                               UG/KG
                                                                                                      ANALYTICAL RESULTS
    610U PHENOL
                                                                               3000UJ 3-NITROANILINE
    610U BIS(2-CHLOROETHYL) ETHER
610U 2-CHLOROPHENOL
                                                                                 610U ACENAPHTHENE
                                                                               3000U 2,4-DINITROPHENOL
3000UJ 4-NITROPHENOL
610U DIBENZOFURAN
610U 2,4-DINITROTOLUENE
     610U 1,3-DICHLOROBENZENE
     610U 1,4-DICHLOROBENZENE
           BENZYL ALCOHOL
1,2-DICHLOROBENZENE
     610U
                                                                                        DIETHYL PHTHALATE
                                                                                 6100
     610U
           2-METHYLPHENOL
                                                                                 610U
                                                                                        4-CHLOROPHENYL PHENYL ETHER
     610U
                                                                                 610U FLUORENE
     610U BIS(2-CHLOROISOPROPYL) ETHER
     610U (3-AND/OR 4-)METHYLPHENOL
610U N-NITROSODI-N-PROPYLAMINE
                                                                                 3000U 4-NITROANILINE
                                                                                3000U 2-METHYL-4,6-DINITROPHENOL
610U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
610U 4-BROMOPHENYL PHENYL ETHER
     6100 HEXACHLOROETHANE
     610U
           NITROBENZENE
           ISOPHORONE
2-NITROPHENOL
2,4-DIMETHYLPHENOL
                                                                                 610U HEXACHLOROBENZENE (HCB)
     610U
                                                                                 3000U PENTACHLOROPHENOL
     610U
                                                                                 610U PHENANTHRENE
     610U
                                                                                 610U ANTHRACENE
610U DI-N-BUTYLPHTHALATE
   3000UJ BÉNZOIC ACID
     6100 BIS(2-CHLOROETHOXY) METHANE
6100 2,4-DICHLOROPHENOL
                                                                                  610U FLUORANTHENE
                                                                                 89J PYRENE
610U BENZYL BUTYL PHTHALATE
200UJ 3,3'-DICHLOROBENZIDINE
     6100
            1,2,4-TRICHLOROBENZENE
           NAPHTHALENE
4-CHLOROANILINE
HEXACHLOROBUTADIENE
     610U
    610UJ
                                                                                1200UJ
                                                                                         BENZO(A) ANTHRACENE
     610U
                                                                                  610U
    610U 4-CHLOROBUTADIENE
610U 2-METHYLNAPHTHALENE
610U HEXACHLOROCYCLOPENTADIENE (HCCP)
610U 2.4.6-TRICHLOROPHENOL
3000U 2,4,5-TRICHLOROPHENOL
                                                                                         CHRYSENÉ
                                                                                  610U
                                                                                 610U BIS(2-ETHYLHEXYL) PHTHALATE
                                                                                  610U BENZO(B AND/OR K) FLUORANTHENE
                                                                                  610U BENZO-A-PYRENE
                                                                                610U INDENO (1,2,3-CD) PYRENE
610U DIBENZO(A,H)ANTHRACENE
610U BENZO(GHI)PERYLENE
     610U 2-CHLORONAPHTHALENE
    30000
            2-NITROANILINE
     6100 DIMETHYL PHTHALATE
6100 ACENAPHTHYLENE
                                                                                         PERCENT MOISTURE
                                                                                    46
           2.6-DINITROTOLUENE
     610U
```

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGANICS DATA	EPA A REPORT * * * * * * * * * * * * * * * * *	-REGION IV ESD, ATHE	NS, GA.	10/12/89
** PROJECT NO. 89-537	SAMPLE NO. 39772 SAMPLE TYP	E: SOIL PROG	ELEM: NSF COLLECTED BY: G C	* * * * * * * * * * * * * * * * * * *
** CASE NO.: 12698 *** * * * * * * * * * * * * * * * * *	SAS NO.: * * * * * * * * * * * * * ANALYTICAL RESULTS	4921D D. N * * * * * * * * * * * * * * * * * * *	O.: N371 * * * * * * * * * * * * * * ANALYTICAL RESU	** * * * * * * * * * * * * * * * * * *
370U PHENOL 370U BIS(2-CHLOROETH 370U 2-CHLOROPHENOL 370U 1,3-DICHLOROBEN 370U 1,4-DICHLOROBEN 370U 1,2-DICHLOROBEN 370U 2-METHYLPHENOL 370U BIS(2-CHLOROISC 370U (3-AND/OR 4-)MN 370U N-NITROSODI-N-1 370U HEXACHLOROETHAN 370U NITROBENZENE 370U ISOPHORONE 370U 2-NITROPHENOL 1800UJ 2,4-DICHLOROETHAN 370U BIS(2-CHLOROETHAN 370U BENZOIC ACID 370U BENZOIC ACID 370U BIS(2-CHLOROETHAN 370U A-DICHLOROPH 370U 1,2,4-TRICHLORO 370U NAPHTHALENE 370U 1,2,4-TRICHLORO 370U HEXACHLOROBUTAN 370U 4-CHLORO-3-METI 370U 4-CHLORO-3-METI 370U 2,4,5-TRICHLOR 370U 2,4,5-TRICHLOR 370U 2-METHYLNAPHTH 370U 12-METHYLNAPHTH 370U 2-MITROPHINI 370U 2-METHYLNAPHTH 370U 2-METHYLNAPHTH 370U 2-MITROPHINI 370U 2-METHYLNAPHTH 370U 2-MITROPHINI 370U 2-METHYLNAPHTH 370U 2-MITROPHINI 370U 2-METHYLNAPHTH	SAS NO.: ************************************	1800UJ 370U 1800UJ 370U 370U 370U 370U 1800U 1800U 1800U 370U 370U 370U 370U 370U 370U 370U 3	3-NITROANILINE ACENAPHTHENE 2,4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2,4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER FLUORENE 4-NITROANILINE 2-METHYL-4,6-DINITROPHENOL N-NITROSODIPHENYL AMINE/DIPHE 4-BROMOPHENYL PHENYL ETHER HEXACHLOROBENZENE (HCB) PENTACHLOROPHENOL PHENANTHRENE ANTHRACENE DI-N-BUTYLPHTHALATE FLUORANTHENE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZYL BUTYL PHTHALATE 3,3'-DICHLOROBENZIDINE BENZO(A)ANTHRACENE CHRYSENE BIS(2-ETHYLHEXYL) PHTHALATE DI-N-OCTYLPHTHALATE BENZO(B AND/OR K)FLUORANTHEN BENZO-A-PYRENE INDENO (1,2,3-CD) PYRENE DIBENZO(GHI)PERYLENE PERCENT MOISTURE	INYL AMINE

\*\*\*REMARKS\*\*\*

```
EXTRACTABLE ORGANICS DATA REPORT
** PROJECT NO. 89-537 SAMPLE NO. 39773 SAMPLE TYPE: SOIL

** PROJECT NO. 89-537 SAMPLE NO. 39773 SAMPLE TYPE: SOIL

** SOURCE: LATEX CONSTRUCTION

** STATION ID: SB-03

** COLLECTION START: 09/11/89 1615 STOP: 00/00/00

**
                                                                                                                                                                                                          * *
* *
UG/KG
                     ANALYTICAL RESULTS
                                                                                                            UG/KG
                                                                                                                                           ANALYTICAL RESULTS
                                                                                                           2900UJ 3-NITROANILINE
                                                                                                          300J ACENAPHTHENE
2900U 2,4-DINITROPHENOL
2900UJ 4-NITROPHENOL
600U DIBENZOFURAN
600U 2,4-DINITROTOLUENE
600U DIETHYL PHTHALATE
      600U BIS(2-CHLOROETHYL) ETHER
600U 2-CHLOROPHENOL
      600U 1,3-DICHLOROBENZENE
600U 1,4-DICHLOROBENZENE
      600U BENZYL ALCOHOL
      600U 1,2-DICHLOROBENZENE
600U 2-METHYLPHENOL
                                                                                                                       4-CHLOROPHENYL PHENYL ETHER
                                                                                                              600U
      600U BIS(2-CHLOROISOPROPYL) ETHER
600U (3-AND/OR 4-)METHYLPHENOL
                                                                                                              6000 FLUORENE
                                                                                                             2900U 4-NITROANILINE
       600U N-NITROSODI-N-PROPYLAMINE
                                                                                                             2900U 2-METHYL-4,6-DINITROPHENOL
600U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
     600U HEXACHLOROETHANE
600UJ NITROBENZENE
                                                                                                              600U 4-BROMOPHENYL PHENYL ETHER
600U HEXACHLOROBENZENE (HCB)
      600U ISOPHORONE
600U 2-NITROPHENOL
                                                                                                                       PENTACHLOROPHENOL
                                                                                                             2900U
   600U 2.4-DIMETHYLPHENOL
2900UJ BENZOIC ACID
600U BIS(2-CHLOROETHOXY) METHANE
                                                                                                              1600 PHENANTHRENE
250J ANTHRACENE
600U DI-N-BUTYLPHTHALATE
      6000 2,4-DICHLOROPHENOL
6000 1,2,4-TRICHLOROBENZENE
6000 NAPHTHALENE
                                                                                                              1900 FLUORANTHENE
                                                                                                              2400 PYRENE
600U BENZYL BUTYL PHTHALATE
200UJ 3,3'-DICHLOROBENZIDINE
930 BENZO(A)ANTHRACENE
     600UJ 4-CHLOROANILINE
600U HEXACHLOROBUTADIENE
                                                                                                           1200ŪJ
       600U 4-CHLORO-3-METHYLPHENOL
                                                                                                               1200
                                                                                                                       CHRYSÈNÉ
       6000 2-METHYLNAPHTHALENE
6000 HEXACHLOROCYCLOPENTADIENE (HCCP)
                                                                                                              800U BIS(2-ETHYLHEXYL) PHTHALATE
600U DI-N-OCTYLPHTHALATE
680J BENZO(B AND/OR K)FLUORANTHENE
   600U HEXACHLOROCYCLOPENIADI
600U 2.4,6-TRICHLOROPHENOL
2900U 2,4,5-TRICHLOROPHENOL
600U 2-CHLORONAPHTHALENE
2900UJ 2-NITROANILINE
600U DIMETHYL PHTHALATE
600U ACENAPHTHYLENE
                                                                                                               1000
                                                                                                                        BENZO-A-PYRENE
                                                                                                              380J INDENO (1,2,3-CD) PYRENE
150J DIBENZO(A,H)ANTHRACENE
460J BENZO(GHI)PERYLENE
                                                                                                                 45 PERCENT MOISTURE
       600U 2,6-DINITROTOLUENE
```

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGANICS DATA REPORT		
*** * * * * * * * * * * * * * * * * *	SAMPLE TYPE: SOIL  PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH COLLECTION START: O9/11/89 1715 STOFE  SAS NO.: 4921D  D. NO.: N373	* * * * * * * * * * * * * * * * * * *
** CASE NO.: 12698 *** * * * * * * * * * * * * * * * * *	SAS NO.: 4921D D. NO.: N373 * * * * * * * * * * * * * * * * * * *	*********
480U PHENOL 480U BIS(2-CHLOROETHYL) ETHER 480U 2-CHLOROPHENOL 480U 1,3-DICHLOROBENZENE 480U 1,4-DICHLOROBENZENE 480U BENZYL ALCOHOL 480U 2-METHYLPHENOL 480U 2-METHYLPHENOL 480U BIS(2-CHLOROISOPROPYL) ETHER 480U (3-AND/OR 4-)METHYLPHENOL 480U N-NITROSODI-N-PROPYLAMINE 480U HEXACHLOROETHANE 480U ISOPHORONE 480U 2-NITROPHENOL 2300U BENZOIC ACID 480U 2,4-DIMETHYLPHENOL 2300U BENZOIC ACID 480U 1,2,4-TRICHLOROPHENOL 480U 1,2,4-TRICHLOROBENZENE 100J NAPHTHALENE 480UJ 4-CHLORO-3-METHYLPHENOL 280U HEXACHLOROBUTADIENE 480U 4-CHLORO-3-METHYLPHENOL 290U 2,4.6-TRICHLOROPHENOL 230OU 2,4.5-TRICHLOROPHENOL	UG/KG  ANALYTICAL RESULTS  2300U 3-NITROANIL INE 170.J ACENAPHTHENE 2300U 2,4-DINITROPHENOL 2300U 4-NITROPHENOL 2300U 4-NITROPHENOL 240U 2,4-DINITROTOLUENE 480U DIETHYL PHTHALATE 480U 4-CHLOROPHENYL PHENYL ETHER 150.J FLUORENE 2300UJ 4-NITROANIL INE 2300UJ 4-NITROANIL INE 2300UJ 4-METHYL-4,6-DINITROPHENOL 480U N-NITROSODIPHENYLAMINE/DIPHENYLAM 480U HEXACHLOROBENZENE (HCB) 2300U PENTACHLOROPHENOL 1600 PHENANTHRENE 360.J ANTHRACENE 480U DI-N-BUTYLPHTHALATE 1800 FLUORANTHENE 1300.J PYENE 480U BENZYL BUTYL PHTHALATE 960U.J 3,3'-DICHLOROBENZIDINE 800 BENZO(A)ANTHRACENE 480U BIS(2-ETHYLHEXYL) PHTHALATE 1000.J BENZO(B AND/OR K)FLUORANTHENE 630 BENZO(A)ANTHRACENE 1000.J BENZO(B AND/OR K)FLUORANTHENE 630 BENZO(A)-PYRENE 300.J INDENO (1.2.3-CD) PYRENE 480U DIBENZO(A,H)ANTHRACENE 320.J BENZO(GHI)PERYLENE	MINE

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

```
* *
UG/KG ANALYTICAL RESULTS
                                                                                        UG/KG ANALYTICAL RESULTS
                                                                                        2000UJ 3-NITROANILINE
400U ACENAPHTHENE
      400U PHENOL
     400U BIS(2-CHLOROETHYL) ETHER
400U 2-CHLOROPHENOL
                                                                                         2000U 2,4-DINITROPHENOL
      400U 1,3-DICHLOROBENZENE
                                                                                        2000UJ
                                                                                                 4-NITROPHENOL
                                                                                          400U DIBENZOFURAN
400U 2,4-DINITROTOLUENE
400U DIETHYL PHTHALATE
400U 4-CHLOROPHENYL PHENYL ETHER
     4000 1,4-DICHLOROBENZENE
4000 BENZYL ALCOHOL
4000 1,2-DICHLOROBENZENE
4000 2-METHYLPHENOL
     400U BIS(2-CHLOROISOPROPYL) ETHER
400U (3-AND/OR 4-)METHYLPHENOL
400U N-NITROSODI-N-PROPYLAMINE
                                                                                          400U FLUORENE
                                                                                         2000U 4-NITROANILINE
2000U 2-METHYL-4,6-DINITROPHENOL
400U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
      400U HEXACHLOROETHANE
     400UJ NITROBENZENE
                                                                                          400U 4-BROMOPHENYL PHENYL ETHER
                                                                                                 HEXACHLOROBENZENE (HCB)
PENTACHLOROPHENOL
     400U ISOPHORONE
400U 2-NITROPHENOL
400U 2,4-DIMETHYLPHENOL
                                                                                          400U
                                                                                         2000U
                                                                                          400U PHENANTHRENE
                                                                                                 ANTHRACENE
DI-N-BUTYLPHTHALATE
FLUORANTHENE
    2000UJ BÉNZOIC ACID
                                                                                           400U
     400U BIS(2-CHLOROETHOXY) METHANE
400U 2,4-DICHLOROPHENOL
400U 1,2,4-TRICHLOROBENZENE
                                                                                          4000
51J
                                                                                           6ÓJ
                                                                                                 PYRENE
                                                                                                 BENZYL BUTYL PHTHALATE
3,3'-DICHLOROBENZIDINE
BENZO(A)ANTHRACENE
      400U NAPHTHALENE
                                                                                          400U
     400UJ 4-CHLOROANILINE
                                                                                         810VJ
      400U
             HEXACHLOROBUTADIENE
                                                                                           400U
             4-CHLORO-3-METHYLPHENOL
2-METHYLNAPHTHALENE
                                                                                                  CHRYSÈNÉ
                                                                                           400U
      400U
                                                                                                 BIS(2-ETHYLHEXYL) PHTHALATE
DI-N-OCTYLPHTHALATE
BENZO(B AND/OR K)FLUORANTHENE
      400U
                                                                                           400U
      400U HEXACHLOROCYCLOPENTADIENE (HCCP)
                                                                                           400U
      400U 2,4,6-TRICHLOROPHENOL
2000U 2,4,5-TRICHLOROPHENOL
400U 2-CHLORONAPHTHALENE
                                                                                           400U
                                                                                                  BENZO-A-PYRENE
                                                                                           400U
     2000U
                                                                                          400U INDENO (1,2,3-CD) PYRENE
400U DIBENZO(A,H)ANTHRACENE
400U BENZO(GHI)PERYLENE
18 PERCENT MOISTURE
    2000UJ 2-NITROANILINE
      400U DIMETHYL PHTHALATE
400U ACENAPHTHYLENE
      400U
            2.6-DINITROTOLUENE
```

\*\*\*REMARKS\*\*\*

FYTRACTARIE ORGANICS DATA DEDORT	EFA-REGION IV ESD, ATTEMS, GA.	10/12/09
*** PROJECT NO. 89-537 SAMPLE NO. 39776 SAMPLE SOURCE: LATEX CONSTRUCTION STATION ID: SS-05	TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 0845 STOP: 00/0	* * * * * * * * * * * * * * * * * * *
** CASE NO.: 12698 SAS *** * * * * * * * * * * * * * * * * *	NO.: 4921D D. NO.: P237 * * * * * * * * * * * * * * * * * * *	* * * * * * * ***
22000U PHENOL 22000U BIS(2-CHLOROETHYL) ETHER 22000U 2-CHLOROPHENOL 22000U 1,3-DICHLOROBENZENE 22000U 1,4-DICHLOROBENZENE 22000U BENZYL ALCOHOL 22000U 1,2-DICHLOROBENZENE 22000UJ 2-METHYLPHENOL 22000UJ (3-AND/OR 4-)METHYLPHENOL 22000UJ HEXACHLOROETHANE 22000UJ HEXACHLOROETHANE 22000U JOPHORONE 22000U 2-NITROPHENOL 22000U 2,4-DIMETHYLPHENOL 11000U BENZOIC ACID 22000U 1,2,4-TRICHLOROBENZENE 22000U 1,2,4-DICHLOROPHENOL 22000U 1,2,4-TRICHLOROBENZENE 22000U 1,2,4-TRICHLOROBENZENE 22000U 4-CHLOROANILINE 22000U 4-CHLOROANILINE 22000U 4-CHLOROANILINE 22000U 4-CHLOROBENZENE 1000J 2-METHYLNAPHTHALENE 22000U 4-CHLOROBENZENE 11000U 2,4,5-TRICHLOROPHENOL 21000U 2,4,5-TRICHLOROPHENOL 22000U 2-CHLORONAPHTHALENE 22000U 2-CHLORONAPHTHALENE 22000U 2-CHLORONAPHTHALENE 22000U 2-CHLORONAPHTHALENE 22000U 2-CHLORONAPHTHALENE 22000U DIMETHYL PHTHALATE 22000U ACENAPHTHYLENE 22000U ACENAPHTHYLENE 22000U ACENAPHTHYLENE 22000U ACENAPHTHYLENE	CITY: SAVANNAH COLLECTION START: 09/12/89 0845 STOP: 00/0  NO.: 4921D D. NO.: P237  ** * * * * * * * * * * * * * * * * *	. <del>!</del>

\*\*\*REMARKS\*\*\*

\*\*\*FOOTNOTES\*\*\*

EXT	RACTABLE ORGANICS DATA REPORT	, · · · · · · · · · · · · · · · ·	
**	STATION ID: SS-06	* * * * * * * * * * * * * * * * * * *	
**	CASE NO.: 12698 SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: P238 **  *********************************	
1	350U PHENOL 350U BIS(2-CHLOROPHENOL 350U 1,3-DICHLOROBENZENE 350U 1,4-DICHLOROBENZENE 350U 1,4-DICHLOROBENZENE 350U 2-METHYLPHENOL 350U 2-METHYLPHENOL 350U 0,3-AND/OR 4-)METHYLPHENOL 350U N-NITROSODI-N-PROPYL AMINE 350U N-NITROSODI-N-PROPYL AMINE 350U N-NITROSODI-N-PROPYL AMINE 350U N-NITROSODI N-PROPYL AMINE 350U SOPHORONE 350U SOPHORONE 350U 2,4-DIMETHYLPHENOL 700UJ BENZOIC ACID 350U 2,4-DIMETHYLPHENOL 350U 1,2,4-TRICHLOROBENZENE 350U 1,2,4-TRICHLOROBENZENE 350U 1,2,4-TRICHLOROBENZENE 350U 1,2,4-TRICHLOROBENZENE 350U 1,2,4-TRICHLOROBENZENE 350U 4-CHLORO-SOBUTADIENE 350U 4-CHLORO-SOBUTADIENE 350U 4-CHLORO-SOBUTADIENE 350U 4-CHLORO-SOBUTADIENE 350U 4-CHLORO-SOBUTADIENE 350U 2,4-FRICHLOROPHENOL 350U 2,4-FRICHLOROPHENOL 350U 2-METHYLNAPHTHALENE 350U 4-CHLORO-SOBUTADIENE (HCCP) 350U 2,4,6-TRICHLOROPHENOL 350U 2-METHYLNAPHTHALENE 350U 2-CHLORO-SOBUTADIENE (HCCP) 350U 2-CHLORONAPHTHALENE	1700UJ 3-NITROANILINE 350U ACENAPHTHENE 1700UJ 4-NITROPHENOL 1700UJ 4-NITROPHENOL 350U DIBENZOFURAN 350U DIENZOFURAN 350U DIETYL PHTHALATE 350U HURRINE 1700U 4-NITROPHENYL PHENYL ETHER FLUORENE 1700U 2-METHYL PHENYL ETHER 1700U 2-METHYL-4,6-DINITROPHENOL 350U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE 350U HEXACHLOROBENZENE (HCB) 1700U PENTACHLOROPHENOL 350U HEXACHLOROPHENOL 350U PHENANTHENE 39J ANTHRACENE 39J ANTHRACENE 39J ANTHRACENE 39J ANTHRACENE 340J FLUORANTHENE 340J FLUORANTHENE 340J FLUORANTHENE 350U BENZYL BUTYL PHTHALATE 340J FLUORANTHENE 350U BENZYL BUTYL PHTHALATE 130J BENZO(A)ANTHRACENE 170J CHRYSENE 400U BIS(2-ETHYLHEXYL) PHTHALATE 130J BENZO(B AND/OR K)FLUORANTHENE 130J BENZO(B AND/OR K)FLUORANTHENE 130J BENZO(B AND/OR K)FLUORANTHENE 130J BENZO(A, H)ANTHRACENE 6 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGAN	TOS DATA REPORT	EFA REGION I	V LSD, ATTICKS	, on.	10/12/03
** PROJECT NO.  ** SOURCE: LATE  ** STATION ID:	89-537 SAMPLE NO. 39 X CONSTRUCTION SR-05	778 SAMPLE TYPE: SOIL	PROG EL CITY: S COLLECT	.EM: NSF COLLECTED BY: G ( GAVANNAH ST: GA TION START: 09/12/89 1005	* * * * * * * * * * * * * * * * * * *
** CASE NO.: 126 *** * * * * * * UG/KG	98 * * * * * * * * * * * * ANALYTICAL RESUL	SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO. * * * * * * UG/KG	: P239 : * * * * * * * * * * * * * * * * * * *	** ** ** * * * * * * * * * * * *** JLTS
420U PHENOL 420U BIS(2-0 420U 2-CHLOR 420U 1,3-DIO 420U 1,4-DIO 420U 1,2-DIO 420U 1,2-DIO 420U BIS(2-0 420U 63-AND 420U N-NITRO 420U NITROB 420U NITROB 420U 150PHOR 420U 2,4-DIO 420U BIS(2-0 420U 2,4-DIO 420U ACENAP 420U 2-KHLOO 2000U 2-NITROB 420U 2-METH 420U 4-CHLOO 420U 4-CHLOO 420U 2-METH 420U 2-CHLOO 2000U 2-NITROB 420U 2-CHLOO 2000U 2-NITROB 420U 2-CHLOO 2000U 2-NITROB 420U 2-CHLOO 2000U 2-NITROB 420U ACENAP 420U ACENAP 420U ACENAP 420U ACENAP	HLOROETHYL) ETHER OPHENOL HLOROBENZENE HLOROBENZENE ALCOHOL HLOROBENZENE ZEPHENOL COROETHANE NOROETHANE NOROETHANE NOROETHANE CONE CHLOROBENZENE CONE CHLOROBENZENE CONE COROETHANE NOROETHANE CONE CHLOROETHOXY) METHANE CHLOROPHENOL CRICHLOROBENZENE LENE COANILINE COROBUTADIENE COROBUTADIENE COROSUTADIENE COROSUTADIENE COROCYCLOPENTADIENE (HCC) FRICHLOROPHENOL CRICHLOROPHENOL CRICH	P)	2000UJ 3 420U 4 2000UJ 2 2000UJ 2 420U 4 420U 4 420U 4 420U 4 420U 4 420U 6 420U 6 420U 6 420U 7 420U 7 420U 7 420U 7 420U 7 420U 8	B-NITROANILINE ACENAPHTHENE 2, 4-DINITROPHENOL 4-NITROPHENOL DIBENZOFURAN 2, 4-DINITROTOLUENE DIETHYL PHTHALATE 4-CHLOROPHENYL PHENYL ETHER ELUGRENE 4-NITROANILINE 2-METHYL-4,6-DINITROPHENOL N-NITROSODIPHENYL AMINE/DIPH 4-BROMOPHENYL PHENYL ETHER EEXACHLOROBENZENE (HCB) PENTACHLOROPHENOL PHENANTHRENE ANTHRACENE DI-N-BUTYLPHTHALATE ELUGRANTHENE	ENYLAMINE 

\*\*\*REMARKS\*\*\*

```
EXTRACTABLE ORGANICS DATA REPORT
PROJECT NO. 89-537 SAMPLE NO. 39779 SAMPLE TYPE: SOIL PROGELEM: NSF COLLECTED BY: G CARTON STURCE: LATEX CONSTRUCTION ST: GA COLLECTION START: 09/12/89 1300 STOP: 00/00/00
* *
                                                                                                                                                **
                                                 SAS NO.: 4921D
** CASE NO.: 12698
                                                                              D. NO P240
                                                                                                                                                * *
UG/KG
                ANALYTICAL RESULTS
                                                                            UG/KG
                                                                                                 ANALYTICAL RESULTS
    550U PHENOL
                                                                            2700UJ 3-NITROANILINE
    5500 BIS(2-CHLOROETHYL) ETHER
5500 2-CHLOROPHENOL
5500 1,3-DICHLOROBENZENE
                                                                              5500 ACENAPHTHENE
                                                                             2700U 2,4-DINITROPHENOL
2700UJ 4-NITROPHENOL
550U DIBENZOFURAN
    5500 1,3-DICHLOROBENZENE
5500 1,4-DICHLOROBENZENE
                                                                            270000
    5500 BENZYL ALCOHOL
                                                                              550U
                                                                                    2.4-DINITROTOLUENE
                                                                              5500 DÍETHYL PHTHALATE
5500 4-CHLOROPHENYL PHENYL ETHER
    550U 1.2-DICHLOROBENZENE
    550U 2-METHYLPHENOL
                                                                              5500 4-CHLORO
    550U BIS(2-CHLOROISOPROPYL) ETHER
    550U (3-AND/OR 4-)METHYLPHENOL
                                                                             2700U 4-NITROANILINE
                                                                                    2-METHYL-4,6-DINITROPHENOL
N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
    550U N-NITROSODI-N-PROPYLAMINE
                                                                             2700ŭ
                                                                              5500
5500
    550U HEXACHLOROETHANE
    550U NITROBENZENE
                                                                                    4-BROMOPHENYL PHENYL ETHER
    5500 ISOPHORONE
5500 2-NITROPHEN
                                                                              550U HEXACHLOROBENZENE (HCB)
    5500 2-NITROPHENOL
5500 2,4-DIMETHYLPHENOL
                                                                             27000
                                                                                    PENTACHLOROPHENOL
                                                                              550U
550U
                                                                                    PHENANTHRENE
  2700UJ BÉNZOTC ACID
                                                                                     ANTHRACENE
    5500 BIS(2-CHLOROETHOXY) METHANE
5500 2,4-DICHLOROPHENOL
                                                                                    DI-N-BUTYLPHTHALATE
                                                                              550U
          2,4-DICHLOROPHENOL
1,2,4-TRICHLOROBENZENE
NAPHTHALENE
                                                                              180J
                                                                                    FLUORANTHENE
                                                                                    PYRENE
BENZYL BUTYL PHTHALATE
    5500
                                                                              210J
     550U
                                                                              550Ú
    550บั้ม
           4-CHLOROANILINE
                                                                            1100ŬĴ
                                                                                    3.3'-DICHLOROBENZIDINE
                                                                                     BENZO(A)ANTHRACENE
     550U HEXACHLOROBUTADIENE
                                                                              110J
    5500 4-CHLORO-3-METHYLPHENOL
5500 2-METHYLNAPHTHALENE
                                                                              110J
                                                                                    CHRYSENE
                                                                              550U BIS(2-ETHYLHEXYL) PHTHALATE
550U DI-N-OCTYLPHTHALATE
140J BENZO(B AND/OR K)FLUORANTHENE
     550U HEXACHLOROCYCLOPENTADIENE (HCCP)
    5500 2.4.6-TRICHLOROPHENOL

5700 2.4.5-TRICHLOROPHENOL

5500 2-CHLORONAPHTHALENE

27000 2-NITROANILINE
                                                                              550U BENZO-A-PYRENE
550U INDENO (1,2,3-CD) PYRENE
550UJ DIBENZO(A,H)ANTHRACENE
    2700U
    2700U
                                                                             550UJ
                                                                                    BENZO(GHI)PERYLENE
     5500 DIMETHYL PHTHALATE
                                                                              550U
     550U ACENAPHTHYLENE
                                                                                    PERCENT MOISTURE
     550U 2.6-DINITROTOLUENE
```

\*\*\*REMARKS\*\*\*

```
* *
                                                                                                                                                                                  * *
** CASE NO.: 12698
                                                      SAS NO.: 4921D D. NO.: P241
UG/KG ANALYTICAL RESULTS
                                                                                              UG/KG ANALYTICAL RESULTS
     1200U PHENOL
                                                                                              5900UJ 3-NITROANILINE
                                                                                              1200U ACENAPHTHENE

5900U 2,4-DINITROPHENOL

5900UJ 4-NITROPHENOL

1200U DIBENZOFURAN

1200U 2,4-DINITROTOLUENE

1200U DIETHYL PHTHALATE
    12000 BIS(2-CHLOROETHYL) ETHER
12000 2-CHLOROPHENOL
12000 1,3-DICHLOROBENZENE
12000 1,4-DICHLOROBENZENE
    1200U BENZYL ALCOHOL
1200U 1,2-DICHLOROBENZENE
1200U 2-METHYLPHENOL
                                                                                                         4-CHLOROPHENYL PHENYL ETHER
                                                                                                12000
     1200U BIS(2-CHLOROISOPROPYL) ETHER
                                                                                                12000
                                                                                                         FLUORENE
    1200U (3-AND/OR 4-)METHYLPHENOL
1200U N-NITROSODI-N-PROPYLAMINE
1200U HEXACHLOROETHANE
                                                                                                         4-NITROANILINE
                                                                                                5900U
                                                                                                59000 2-METHYL-4.6-DINITROPHENOL
12000 N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
    1200UJ NITROBENZENE
                                                                                                1200U 4-BROMOPHENYL PHENYL ETHER
   1200U ISOPHORONE
1200U 2-NITROPHENOL
1200U 2.4-DIMETHYLPHENOL
5900UJ BENZOIC ACID
                                                                                                1200U
                                                                                                         HEXACHLOROBENZENE (HCB)
                                                                                                59000
                                                                                                         PENTACHLOROPHENOL
                                                                                                         PHENANTHRENE
                                                                                                12000
                                                                                                         ANTHRACENE
DI-N-BUTYLPHTHALATE
                                                                                                12000
     1200U BIS(2-CHLOROETHOXY) METHANE
                                                                                                1200U
     1200U 2.4-DICHLOROPHENOL
1200U 1.2,4-TRICHLOROBENZENE
                                                                                                12000
                                                                                                         FLUORANTHENE
                                                                                                         PYRENE
                                                                                                12000
                                                                                                         BENZYL BUTYL PHTHALATE
3,3'-DICHLOROBENZIDINE
BENZO(A)ANTHRACENE
CHRYSENE
     1200U NAPHTHALENE
                                                                                                12000
    1200UJ 4-CHLOROANILINE
                                                                                               2400UJ
    1200U HEXACHLOROBUTADIENE
1200U HEXACHLOROBUTADIENE
1200U 4~CHLORO-3-METHYLPHENOL
1200U 2~METHYLNAPHTHALENE
1200U HEXACHLOROCYCLOPENTADIENE (HCCP)
1200U 2.4,5-TRICHLOROPHENOL
1200U 2.4,5-TRICHLOROPHENOL
1200U 2-CHLORONAPHTHALENE
                                                                                                12000
                                                                                                12000
                                                                                                1200U BIS(2-ETHYLHEXYL) PHTHALATE
1200U DI-N-OCTYLPHTHALATE
1200U BENZO(B AND/OR K)FLUORANTHENE
                                                                                                12000
                                                                                                          BENZO-A-PYRENE
                                                                                                12000
                                                                                                12000 INDENO (1,2,3-CD) PYRENE
12000 DIBENZO(A,H)ANTHRACENE
12000 BENZO(GHI)PERYLENE
73 PERCENT MOISTURE
    5900UJ 2-NITROANILINE
1200U DIMETHYL PHTHALATE
1200U ACENAPHTHYLENE
     1200U 2.6-DINITROTOLUENE
```

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGANICS DATA REPORT	LFM-REGION IV ESD, ATTEMS, GA.	10/12/09
*** * * * * * * * * * * * * * * * * *	TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1440 STOP: 00/0	* * * * * * * * * * * * * * * * * * *
** CASE NO : 12609 CAS N	NO.: 4921D D. NO.: P242 ***********************************	**
*** ** * * * * * * * * * * * * * * * *	3100U 3-NITROANILINE 630U ACENAPHTHENE 3100U 2,4-DINITROPHENOL 630U DIBENZOFURAN 630U 2,4-DINITROTOLUENE 630U DIETHYL PHTHALATE 630U 4-CHLOROPHENYL PHENYL ETHER 630U 4-NITROANILINE 3100U 2-METHYL-4,6-DINITROPHENOL 630U N-NITROSODIPHENYL AMINE/DIPHENYLAMINE 630U 4-BROMOPHENYL PHENYL ETHER 630U HEXACHLOROBENZENE (HCB) 3100U PENTACHLOROPHENOL 630U PHENANTHRENE 630U ANTHRACENE 630U DI-N-BUTYLPHTHALATE 630U FLUORANTHENE 630U BENZYL BUTYL PHTHALATE 630U BENZYL BUTYL PHTHALATE 630U BENZO(A)ANTHRACENE 630U BENZO(A)ANTHRACENE 630U BENZO(A)ANTHRACENE 630U BIS(2-ETHYLHEXYL) PHTHALATE 630U BENZO(B AND/OR K)FLUORANTHENE 630U DIDENO(1,2,3-CD) PYRENE 630U DIBENZO(A,H)ANTHRACENE	

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGANICS DATA REPORT	V ESD, ATRENS, GA.	10/12/69
** PROJECT NO. 89-537 SAMPLE NO. 39782 SAMPLE TYPE: SOIL ** SOURCE: LATEX CONSTRUCTION ** STATION ID: SD-04	PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1510 STOP: 00/00/	* * * * * * * ** ** ** ** **
** CASE NO.: 12698 SAS NO.: 4921D *** * * * * * * * * * * * * * * * * *	D. NO.: P243 * * * * * * * * * * * * * * * * * * *	**
*** CASE NO.: 12698  *** * * * * * * * * * * * * * * * * *	2500U 3-NITROANILINE 520U ACENAPHTHENE 2500U 2,4-DINITROPHENOL 2500UJ 4-NITROPHENOL 520U DIBENZOFURAN 520U 2,4-DINITROTOLUENE 520U DIETHYL PHTHALATE 520U 4-CHLOROPHENYL PHENYL ETHER 520U 4-CHLOROPHENYL PHENYL ETHER 520U 0, NITROANILINE 2500U 2-METHYL-4,6-DINITROPHENOL 520U 0, NITROSODIPHENYL AMINE/DIPHENYL AMINE 520U 1, NITROSODIPHENYL ETHER 520U 1, HEXACHLOROBENZENE (HCB) 520U 1, HEXACHLOROPHENOL 520U 1, HEXACHLOROPHENOL 520U 1, NITROSODIPHENOL 520U 1, NITR	

\*\*\*REMARKS\*\*\*

EXTRACTABLE ORGANICS DATA RE	DODT EPA-REGION	IV ESD, ATRENS, GA.	10/12/69
*** * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *
** CASE NO.: 12698 *** * * * * * * * * * * * * * * * * *	SAS NO.: 4921D * * * * * * * * * * * * * * * * * * *	D. NO.: P244 * * * * * * * * * * * * * * * * * * *	** * * * * * * * * * * * * * * * * * *
660U PHENOL 660U BIS(2-CHLOROETHYL) 660U 2-CHLOROPHENOL 660U 1,3-DICHLOROBENZEN 660U 1,4-DICHLOROBENZEN 660U 1,2-DICHLOROBENZEN 660U 2-METHYLPHENOL 660U 2-METHYLPHENOL 660U 3-AND/OR 4-)METHY 660U 660U N-NITROSODI-N-PROP 660U HEXACHLOROETHANE 660U NITROBENZENE 660U 150PHORONE 660U 2-NITROPHENOL 3200U BENZOIC ACID 660U 2,4-DICHLOROETHOXY 660U 2,4-DICHLOROPHENOL 660U 1,2,4-TRICHLOROBEN 660U 1,2,4-TRICHLOROBEN 660U 4-CHLOROANILINE 660U 4-CHLOROANILINE 660U 4-CHLOROANILINE 660U 4-CHLOROANILINE 660U 2,4-5-TRICHLOROPHE 660U 2,4-5-TRICHLOROPHE 660U 2,4,5-TRICHLOROPHE 660U 2-CHLORONAPHTHALEN 660U 2-CHLORONAPHTHALEN 660U 2-CHLORONAPHTHALEN 660U 2-CHLORONAPHTHALEN 660U DIMETHYL PHTHALATE 660U ACENAPHTHYLENE	SAS NO.: 4921D  * * * * * * * * * * * * * * * * * * *	3200U 3-NITROANILINE 660U ACENAPHTHENE 3200U 2,4-DINITROPHENOL 3200U 2,4-DINITROPHENOL 660U DIBENZOFURAN 660U DIBENZOFURAN 660U DIETHYL PHTHALATE 660U 4-CHLOROPHENYL PHENYL ETHER 660U 4-CHLOROPHENYL PHENYL ETHER 660U 4-NITROANILINE 3200U 2-METHYL-4,6-DINITROPHENOL 660U N-NITROSODIPHENYLAMINE/DIPHE 660U 4-BROMOPHENYL PHENYL ETHER 660U HEXACHLOROBENZENE (HCB) 3200U PENTACHLOROPHENOL 660U ANTHRACENE 660U DI-N-BUTYLPHTHALATE 380J FLUORANTHENE 660U DI-N-BUTYLPHTHALATE 1300UJ 3,3'-DICHLOROBENZIDINE 660U BENZYL BUTYL PHTHALATE 130UJ 3,3'-DICHLOROBENZIDINE 660U BENZO(A)ANTHRACENE 190J CHRYSENE 2000U BIS(2-ETHYLHEXYL) PHTHALATE 130J BENZO(B AND/OR K)FLUORANTHEN 150J BENZO(B AND/OR K)FLUORANTHEN 660U INDENO (1,2,3-CD) PYRENE 660U DIBENZO(A,H)ANTHRACENE 50 PERCENT MOISTURE	

\*\*\*REMARKS\*\*\*

```
STATION ID: SD-06
                                                                     COLLECTION START: 09/12/89 1610 STOP: 00/00/00
* *
                                                                                                                               * *
                                        SAS NO.: 4921D
                                                                  D. NO.: P245
** CASE NO.: 12698
                                                                                                                               **
UG/KG ANALYTICAL RESULTS
                                                                    UG/KG
                                                                                      ANALYTICAL RESULTS
    690U PHENOL
                                                                    3300U 3-NITROANILINE
    690U BIS(2-CHLOROETHYL) ETHER
690U 2-CHLOROPHENOL
                                                                     690U ACENAPHTHENE
                                                                   3300UJ 2.4-DINITROPHENOL
    690U 1.3-DICHLOROBENZENE
                                                                          4-NITROPHENOL
                                                                    3300U
    690U
         1,4-DICHLOROBENZENE
                                                                          DIBENZOFURAN
                                                                     690U
         BENZYL AL COHOL

1,2-DICHLOROBENZENE
                                                                     6900 2.4-DINITROTOLUENE
6900 DIETHYL PHTHALATE
    690U
    690U
    690U
         2-METHYLPHENOL
                                                                           4-CHLOROPHENYL PHENYL ETHER
                                                                     690U
    690U BIS(2-CHLOROISOPROPYL) ETHER
                                                                     690U
                                                                          FLUORENE
         (3-AND/OR 4-)METHYLPHENOL
    690U
                                                                    33000
                                                                          4-NITROANILINE
                                                                    3300U 2-METHYL-4.6-DINITROPHENOL
690U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
         N-NITROSODI-N-PROPYLAMINE
    690U
    690U
         HEXACHLOROETHANE
    690U NITROBENZENE
                                                                     690U 4-BROMOPHENYL PHENYL ETHER
    690U
690U
          ISOPHORONE
                                                                           HEXACHLOROBENZENE (HCB)
                                                                     690U
         2-NITROPHENOL
2.4-DIMETHYLPHENOL
BENZOIC ACID
                                                                    33000
                                                                           PENTACHLOROPHENOL
    690Ü
                                                                     690U
690U
                                                                           PHENANTHRENE
                                                                           ANTHRACENE
DI-N-BUTYLPHTHALATE
  33000J
                                                                     6900
6900
    690U
          BIS(2-CHLOROETHOXY) METHANE
         2,4-DICHLOROPHENOL
1,2,4-TRICHLOROBENZENE
                                                                           FLUORANTHENE
    690U
    690U
                                                                     690U
690U
                                                                           PYRENE
BENZYL BUTYL PHTHALATE
          NAPHTHALENE
    690U
                                                                           3,37-DICHLOROBENZIDINE
BENZO(A)ANTHRACENE
CHRYSENE
    690U
          4-CHLOROANILINE
                                                                    1400Ŭ
    690U
690U
          HEXACHLOROBUTADIENE
                                                                     690U
74J
          4-CHLORO-3-METHYLPHENOL
                                                                           BIS(2-ETHYLHEXYL) PHTHALATE
DI-N-OCTYLPHTHALATE
    690U
          2-METHYLNAPHTHALENE
                                                                    690UJ
          HEXACHLOROCYCLOPENTADIENE (HCCP)
                                                                     690U
220J
    690U
         2,4.6-TRICHLOROPHENOL
2,4,5-TRICHLOROPHENOL
                                                                           BENZO(B AND/OR K)FLUORANTHENE
BENZO-A-PYRENE
    690U
   33000
                                                                      87J
          2-CHLORONAPHTHALENE
                                                                    690U INDENO (1,2,3-CD) PYRENE
690UJ DIBENZO(A,H)ANTHRACENE
    690U
    33000
          2-NITROANILINE
                                                                     690U BENZO(GHI)PERYLENE
    690U DIMETHYL PHTHALATE
          ACENAPHTHYLENE
    690U
                                                                       52 PERCENT MOISTURE
         2.6-DINITROTOLUENE
    690U
```

\*\*\*REMARKS\*\*\*

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39768 SAMPLE TYPE. SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: SS-01 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1245 STOP: 00/00/00 D. NO.: N367 MD NO: N367 \* \* \* \* \*\* SAS NO.: 4921D \* \* \*\* \* \* \* \* 

ANALYTICAL RESULTS UG/KG

200JN BENZENEACETIC ACID 5000J 5 UNIDENTIFIED COMPOUNDS

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROG FLEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1410 STOP: 00/00/00 PROJECT NO. 89-537 SAMPLE NO. 39770 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SS-02 CASE.NO.: 12698 SA \* # \*\* \* \* \*\* MD NO: N369 D. NO.: N369 SAS NO.: 4921D \* \* \* \* \* \* \* \* 

#### ANALYTICAL RESULTS UG/KG

2000J 4 UNIDENTIFIED COMPOUNDS 800JN 200JN CHLOROTRIS(METHYLPROPYL)STANNANE ETHYLIDENEBIS(EIHYLBENZÉNE) 300JN BENZOPYRENE (NOT A)

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39771 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION CITY: SAVANNAH ST: GA \*\* COLLECTION START: 09/11/89 1445 STOP: 00/00/00 D. NO.: N370 MD NO: N370 STATION ID: SB-02 \* \* \* \* SAS NO.: 4921D \*\* CASE.NO.: 12698 \* \* \*\*

#### ANALYTICAL RESULTS UG/KG

500JN OXYBISETHANOL DIACETATE 4000JN ETHANEDIOL MONOACETATE 5000J 2 UNIDENTIFIED COMPOUNDS

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39773 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA SOURCE: LATEX CONSTRUCTION STATION ID: SB-03 CASE.NO.: 12698 S4 CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1615 STOP: 00/00/00 D. NO.: N372 MD NO: N372 \*\* \*\* SAS NO.: 4921D \*\* \* \* \*\* \* \* 

#### ANALYTICAL RESULTS UG/KG

30000J 15 UNIDENTIFIED COMPOUNDS 1000JN DIMETHYLNAPHTHALENE 3000JN TRIMETHYLNAPHTHALENE 20000JN CHLOROTRIS(METHYLPROPYL)STANNANE

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39774 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: SS-04 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1715 STOP: 00/00/00 D. NO.: N373 MD NO: N373 CITY: SAVANNAH \* \* \*\* SAS NO.: 4921D \*\* \* \* \* \* \* \* 

#### ANALYTICAL RESULTS UG/KG

ETHANEDIOL MONOACETATE TRIBROMOPHENOL CYCLOPENTAPHENANTHRENE 4000JN 300JN 200JN BENZOFLUORENE (2 ISOMERS)
BENZOFLUORANTHENE (NOT B OR K) 300JN 400JN 600J 1 UNIDENTIFIED COMPOUND

<sup>\*</sup>A-AVERAGE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO 89-537 SAMPLE NO. 30775 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: 58-04 CITY: SAVANNAH ST: GA COLLECTION START: 09/11/89 1735 STOP: 00/00/00 \* \* \*\*

\*\* CASE.NO.: 12698 SAS NO.: 4921D D. NO.: P236 MD NO: Q236 \* \* \* \*

ANALYTICAL RESULTS UG/KG

800J 2 UNIDENTIFIED COMPOUNDS

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

\*\*

\*\*

\*\* \*\*

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT 

PROJECT NO. 89-537 SAMPLE NO. 39776 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH

SOURCE: LATEX CONSTRUCTION STATION ID: SS-05 CASE.NO.: 12698 SA

CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 0845 STOP: 00/00/00

\* \*

\*\*

SAS NO.: 4921D

D. NO.: P237

MD NO: Q237

ANALYTICAL RESULTS UG/KG

E0000001

17 UNIDENTIFIED COMPOUND

N. 100000JN 200000JN PETROLEUM PRODUCT DIMETHYLNAPHTHALENE TRIMETHYLNAPHTHALENE

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

\* \*

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 89-537 SAMPLE NO. 39777 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: G CARTON SOURCE: LATEX CONSTRUCTION STATION ID: SS-06 CASE.NO.: 12698 SA CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 0950 STOP: 00/00/00 D. NO.: P238 MD NO: Q238 \* =

\*\* SAS NO.: 4921D \*\* \*\* \* \* \* \* 

#### ANALYTICAL RESULTS UG/KG

300JN CHLROTRIS(METHYLPROPYL)STANNANE BENZOPYRENE (NOT A)
8 UNIDENTIFIED COMPOUNDS 400JN 5000J

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROG ELEM: NSF COLLECTED BY: G CARTON ST: SAVANNAH ST: GA COLLECTION START: 09/12/89 1005 STOP: 00/00/00 D. NO.: P239 MD NO: Q239 PROJECT NO. 89-537 SAMPLE NO. 39778 SAMPLE TYPE: SOIL SOURCE. LATEX CONSTRUCTION \* \* STATION ID: SB-05 \* \* \* \* \*\* CASE.NO.: 12698 SAS NO.: 4921D \* \* \*\* 

ANALYTICAL RESULTS UG/KG

1000J 2 UNIDENTIFIED COMPOUNDS

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROG FLEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1300 STOP: 00/00/00 D. NO.: P240 MD NO: Q240 PROJECT NO. 89-537 SAMPLE NO. 39779 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SD-01 CASE.NO.: 12698 SA \*\* \*\* SAS NO.: 4921D \*\* \* \* \* \* \*\*

ANALYTICAL RESULTS UG/KG

3000J 2 UNIDENTIFIED COMPOUNDS

<sup>\*</sup>A-AVERAGE \*NUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

\* \*

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39781 SAMPLE TYPE: SOIL PROG FLEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1440 STOP: 00/00/00 D: NO.: P242 MD NO: Q242 SOURCE: LATEX CONSTRUCTION STATION ID: SD-03 **\*** \* \* \* \* \* \* \* CASE.NO.: 12698 SAS NO.: 4921D \*\*

ANALYTICAL RESULTS UG/KG

3000JN ETHANEDIOL MONOACETATE

\*\*\*FOOTNOTES\*\*\*

\*\*

<sup>\*</sup>A-AVERAGE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL

\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN

\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

10/12/89

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROJECT NO. 89-537 SAMPLE NO. 39783 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SD-05 CASE.NO.: 12698 SAS NO.: 4921D PROG ELFM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1550 STOP: 00/00/00 D. NO.: P244 MD NO: Q244 \* \* \* \* \*\* \* \* \* \* \*\*

ANALYTICAL RESULTS UG/KG

CHLOROTRIS(METHYLPROPYL)STANNANE
1 UNIDENTIFIED COMPOUND 1000JN 700 J

<sup>\*</sup>A-AVERAGE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE, COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

\* \* \* \*

\*\*

\* \*

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT PROG ELEM: NSF COLLECTED BY: G CARTON CITY: SAVANNAH ST: GA COLLECTION START: 09/12/89 1610 STOP: 00/00/00 D. NO.: P245 MD NO: Q245 PROJECT NO. 89-537 SAMPLE NO. 39784 SAMPLE TYPE: SOIL SOURCE: LATEX CONSTRUCTION STATION ID: SD-06 CASE.NO.: 12698 SA SAS NO : 4921D \* \* \* \* ANALYTICAL RESULTS UG/KG 20000 2 UNIDENTIFIED COMPOUNDS

<sup>\*\*\*</sup>FOOTNOTES\*\*\*

<sup>\*</sup>A-AVERAGE VALUE \*NA-NOT ANALYZED \*NAI-INTERFERENCES \*J-ESTIMATED VALUE \*N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
\*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN \*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
\*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
\*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.



## Site Inspection Report

### SEPA

## POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT RT 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

GA D9 60603696

\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	PART 1 - SITE	LOCATION AND II	NSPECTION INFORMA	TION	2780003646
II. SITE NAME AND LOCATION					
Of SITE NAME Legal common or descriptive name	πe of site)	02	STREET, ROUTE NO , OR SPE	CIFIC LOCATION IDENTIFIER	
Laster Constant	tion C		3126 Rive	r Roal	
Latex Construction	1100	04	3/26 Rive	06 COUNTY	07000NTH 18 12NB 300E 248T
Thurderbolt			-A 31404	Chathan	. 300E 2/81
29 COORDINATES	ONGITUDE	A. PRIVATE	Check one: B. FEDERAL	C. STATE I D COUNTY	F MUNICIPAL
32 C 1 23. 081	02-2C	☐ F. OTHER		Z G. UNKNOW	
III. INSPECTION INFORMATION  01 DATE OF INSPECTION 02 S	SITE STATUS	03 YEARS OF OPERATION			·
1			3   Presen	L HAIRAIOWAI	
OP 11 89	□ INACTIVE	BEGINN	ING TEAR ENDING TEAR	T — ONKNOWN	•
04 AGENCY PERFORMING INSPECTION ICA	eck all that apply)				
_ A EPA ZB EPA CONTRACTO	DR NKS C	er p	C. MUNICIPAL 🚾 D. MU	INICIPAL CONTRACTOR	Name or rem
E E STATE E F STATE CONTRAC		lame of limit	G. OTHER	(Specify)	
05 CHIEF INSPECTOR	······································	OS TITLE .		07 ORGANIZATION	08 TELEPHONE NO
(500CCase ( - 1)	~, ^)	Project	Marian	NILL	1404 938-7710
GROFFIEL CIERTO	·~	10 TITLE	Manager	NLS 11 ORGANIZATION	12 TELEPHONE NO
Ray Your		630	•	l .	( )
RON Young		Semples		Nus	<del> </del>
l	1	1		ANL	( )
David Mattiford		Sample	<u>r</u>	NLS	-
		1		1,1,1	( )
Gordon Buchay	NON	Mealth	+ Safety	NUS	· · · · · · · · · · · · · · · · · · ·
<u> </u>			,		
Jerald Title		Scenple	<u>r</u>	Nus	( )
	`	Sampli.		NKS	( )
Roser Frankli	<u>/~</u>	14 TITLE	// ISADDRESS		16 TELEPHONE NO
1		Hend Suffety	15ADDRESS 3126 Rive	er Rd	19101301711
Lean White		Decurity	ist TINITY IN	lerbott, GA	1912/351-34-69
(		[ENVIRONMENTA]	17,217,70	dustries	1214 631-4420
Gary Raven		+	Dallay, 7	exag	1214 631-4420
<b>,</b> , ,		Consultant	west right	use Environmental	19121272
Ruty Cherry I	Ш	tor Property Co	over Savanah,	GA	19121233-3443
					1,
	· <u> </u>	<del></del>			<del>  `                                   </del>
ł ·					1,
<u> </u>					1 1
17 ACCESS GAINED BY 18 TIME OF	FINSPECTION	19 WEATHER CONDITION	ONS .		•
PERMISSION CE	300	(100	r ~70° F	<u> </u>	
		1 Ca	1 /0 /		
IV. INFORMATION AVAILABLE FRO	<u></u>	102 OF Agency Organization	00)		03 TELEPHONE NO
1				·	( ")ZL17 C
Mario Villamarz	0	EPA		Laz ZEL EDUONE NO	1347-50-65
		1 1	08 ORGANIZATION	07 TELEPHONE NO.	OB DATE
Geoffier Cur	ton	1 FITT	Nus Corp	404)938-7710	<u> </u>
EPA FORM 2070-13 (7-61)				<u>, , , , , , , , , , , , , , , , , , , </u>	

<b>VERA</b>	3	EF	PA
-------------	---	----	----

## POTENTIAL HAZARDOUS WASTE SITE

I. IDENTIFICATION

<b>SEPA</b>			SITE INSPECTION REPORT PART 2 - WASTE INFORMATION			GA 10980803696	
II. WASTES	STATES, QUANTITIES, AN	D CHARACTE	RISTICS	<del></del>			
	STATES THIS ITEM	12 MASTE DUAM		D3 WASTE CHARACTE	RISTICS (1974 Horna)	ice.	
A SCUID E SLUPRY CONS B POWDER FINES OF DIQUID TONS		at least 837	A TOAIC E SOLE B CORROSIVE F INFE		THOUS JEAPLO MABLE REACT ABLE LINCOM	" <b>,</b> E	
D OTHER	icec',	NO OF TRUMS				, M. NOT A	PPL(CABLE
III. WASTE 1	TYPE	<del></del>	·····	<u> </u>		<del></del>	
CATEGORY	SUBSTANCE N	AME	01 GROSS AMOUNT	C2 UNIT OF MEASURE	03 COMMENTS		
SLU	SLUDGE						
OLW	OILY WASTE						
SOL	SOLVENTS		LENGENG WH				
PSD	PESTICIDES		KNIKNOWN				
occ	OTHER ORGANIC CH	EMICALS	UN KNOWN				
IOC	INORGANIC CHEMIC	ALS					
ACD	ACIDS						
BAS	BASES						
MES	HEAVY METALS		KNENCHI				
V. HAZARD	OUS SUBSTANCES : 544 Ap	pendix for most freque	entry cited CAS Numbers.				
1 CATEGORY	02 SUBSTANCE N	AME	03 CAS NUMBER	04 STORAGE DISE	POSAL METHOD	05 CONCENTRATION	OB MEASURE O
ME5	Argenic			UNLONTA	NEX	14	HIL/KG
MES	Barina			15		130	0 110
MES	Berylling			н		2.9	ls
ME5	Cadming_			11		17	()
MES	Chromium			11		97 (estimat	11
MES	cobalt			11		30	LI.
MES	Copper			l/		1700	J١
HES	Lead			11		1500	, IX
ME5	Merchry			11		1.2	1(
MES	Nickel			11		230	I N
MES	Venadium			11		110	1)
ME5	Z, NC			1/		2600	l ti
OCC	MONObuty) -	tin		11		99	uglk
CCC	Dibutyl tin			- 11		930	0,0
OCC	Tributyl tin	· .				970	H
•	See Next	- pace	for Add	itional C	omounds		
V. FEEDSTO	OCKS See Appandix or CAS Numb				7	<u> </u>	
SATEGORY	S! FEEDSTOC	K NAME	02 CAS NUMBER	CAFEGORY	01 FEEDST	OCK NAME	DZ CAS NUMBER
=DS			<del> </del>	FDS		······································	
FDS				FOS			
FDS				FDS			
FDS		<del></del>		FDS			<del> </del>
				<u> </u>			<del></del>

**\$EPA** 

#### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

GA 0980803696

IV. HAZARDOUS SUBSTANCES IS O ACCOUNT OF MOST PROGRAMME CAS MARGONI CONTINE LEE					
01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF
SOL	Ethyl Benzene		uncontained	2_1	ug/kg
SOL	Total XVIenes		1)	2.8	0,,0
OCC	Phenanthiere		D.	38,000	11
حرد	Fluorantherie		1)	2900	71
OLL	Priene		11	2400	11
CCC	Berizo (A) anthracence			930	11
PSD	Gamma-Chlordupe		11	930	P

**\$EPA** 

# POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

	I. IDENTIFICATION			
O1 STATE	02 SITE NUMBER DGECEO3696			

II. HAZARDOUS CONDITIONS AND INCIDENTS	<del></del>
	02 ZOBSERVED IDATE 7/25/68   POTENTIAL ALLEGED 04 NARRATIVE DESCRIPTION
low concentrations of cry	ganic solvents detected in surfice!
acquiter	
01 /3 SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED	
contamination of sedin	cants in Williamson Caee-K
01 / C CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED:	02 = OBSERVED (DATE) Z POTENTIAL = ALLEGED 04 NARRATIVE DESCRIPTION
sandblasting is conducted particulated is likely	in the open the release of contaminated
01 Z D FIRE EXPLOSIVE CONDITIONS 03 PUPULATION POTENTIALLY AFFECTED:	02 TOBSERVED (DATE) TOTENTIAL TALLEGED 04 NARRATIVE DESCRIPTION
Nove Observed	
01 Z E DIRECT CONTACT 03 POPULATION POTENTIALLY AFFECTED:	02 T OBSERVED (DATE) POTENTIAL 4LLEGED 04 NARRATIVE DESCRIPTION
Contaminated Surface	e soils found on site 9/89
01 / F CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: >	02 Z OBSERVED (DATE 9/89) T POTENTIAL TALLEGED 04 NARRATIVE DESCRIPTION
Surface and Subsurface	Goils contaminated with inorganic
and organic compounds.	
01 EG ORINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED:	02 TOBSERVED (DATE) TOTENTIAL TALLEGED 04 NARRATIVE DESCRIPTION
	pater for surrounding communities
is from a confined o	equiter
01 J. H. ACRKER EXPOSURE INJURY 03 WORKERS FOTENTIALLY AFFECTED:	02 TOBSERVED (DATE ) J POTENTIAL J ALLEGED 04 NARRATIVE DESCRIPTION
None Observed	
01 I. POPULATION EXPOSURE: INJURY 03 POPULATION POTENTIALLY AFFECTED:	02 II OBSERVED (DATE) I POTENTIAL II ALLEGED 04 NARRATIVE DESCRIPTION
Nove observed	

**ŞEPA** 

### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION 01 STATE 02 SITE NUMBER
GA P980803696

PART 3 - DESCRIPTION OF HA	AZARDOUS CONDITIONS AND INCIDENT	S	76-6-3-7~
II. HAZARDOUS CONDITIONS AND INCIDENTS			
01 ZU DAMAGE TO FUDRA 04 NARRATIVE DESCRIPTION	02 T. OBSERVED (DATE)	Z POTENTIAL	I ALLEGED
Contaminants have ent	tered williamson	Creek +	Surroundin
Salt Marsh		,	•
01 Z K DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION Literalme (1.3 literals	02 TOBSERVED (DATE)	Z POTENTIAL	_ ALLEGED
Sec albove			•
01 Z.L. CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 I OBSERVED (DATE)		
There are recreational	+ commercial fish	eries in	cedjace Nt
waterg			
01 ZM. UNSTABLE CONTAINMENT OF WASTES	02 ZOBSERVED (DATE 4/11/89)	☐ POTENTIAL	_ ALLEGED
Spits Runoil Standing rapids Leaking drums:  33 POPULATION POTENTIALLY AFFECTED:	04 NARRATIVE DESCRIPTION	r	
a windper of string in	sere observed arou	and prop	erry.
one stair was sample of PNA's.	led and contained	hyh Cox	centration
- LIABOATUE DECOMPTION	02 _ OBSERVED (DATE)		
contamination may	have entered ac	jacent	Eja IT
marsh			
01 $\stackrel{-}{\_}$ O CONTAMINATION OF SEWERS. STORM DRAINS, WWTPs 04 NARRATIVE DESCRIPTION	02 TOBSERVED (DATE:)	_ POTENTIAL	_ ALLEGED
Noise Observed			
·			
01 T P ILLEGAL UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 _ OBSERVED (DATE)	POTENTIAL	_ ALLEGED
Novie observed			
, 0, 2			
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLE	GED HAZARDS		·
H. TOTAL POPULATION POTENTIALLY AFFECTED:			<del></del>
V. COMMENTS			
		·	
V. SOURCES OF INFORMATION (Cite specific references, e.g., state files	sample analysis reports		
State, EPA + FIT files			

$\wedge$		
		$D\Delta$
	<b>L</b> .	

### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION PART 4- REPMIT AND DESCRIPTIVE INFORMATION

		TECATION
i	O1 STATE	02 SITE NUMBER
	C-A	0980803696

WEFA	PART 4 - PERMIT	AND DES			ON	GA D980803696
II. PERMIT INFORMATION		-				
31 TYPE OF PERMIT SSUED Officer (MINUS)	02 PERMIT NUMBER	03 DATE IS	SUED 04	EXPIRATION DATE	05 COMMENTS	
1 NPDES		1				
a UIC		<del>                                     </del>			<del></del>	
√C AIR	GAD984268615	†				Irrued to Linkher
/D RCRA	G-A0981223688				filecle	
SE RCRAINTERIM STATUS	G-11 121223666				THE CIE	70.
F SPCC PLAN	<del></del>					
I G STATE SUPPLY	-	<del> </del>				
TH LOCAL SCHOOL					<del></del>	
I OTHER Scoots.						
		<del>                                     </del>		<del></del>		
I J NONE		<u> </u>				
III. SITE DESCRIPTION OI STORAGE DISPOSAL Check all that apply:	02 AMOUNT 03 UNIT OF	MEASURE	TA TREAT	MENT Check all that ap		05 OTHER
	SETTINGOIST CO DISTE OF	EAGURE			w.t.	33 3
Z 8. PILES _	837 yd	3		ENERATION		A. BUILDINGS ON SITE
Z C DRUMS, ABOVE GROUND	711			DERGROUND INJE		
ZD TANK, ABOVE GROUND				EMICAL PHYSICAI ILOGICAL	L	
E. TANK, BELOW GROUND				STE OIL PROCESS	SING	06 AREA OF SITE
_ F LANDFILL				LVENT RECOVERY		
☐ G. LANDFARM				HER RECYCLING		~27
_ H OPEN DUMP	<del> </del>		☐ H. OT!	HER	·	ļ
_ 1. OTHER		Ī		:Spec	city)	
		·				
IV. CONTAINMENT	·				<del></del>	
01 CONTAINMENT OF WASTES Check one;				<del></del>		
A ADEQUATE, SECURE	□ B. MODERATE	ZC. IN	ADEQUAT	E. POOR	I D. INSECU	IRE, UNSOUND, DANGEROUS
02 DESCRIPTION OF DRUMS, DIKING, LINERS, E	ARRIERS, ETC.				<del> </del>	
V. ACCESSIBILITY						
D1 WASTE BASILY AGGESSIBLE. [] YES	ZNO				<del></del>	
Access from la	nd is rest	ricte	d by	y tence		
VI. SOURCES OF INFORMATION Cite 30	ecific references e gi state tiles i lamoie	enares reco	//s.	<del></del>		
State, EPA +1	EIT files	•				
						·

SEPA SITE INSP			SITE INSPECT	ARDOUS WASTE SITE ECTION REPORT PHIC, AND ENVIRONMENTAL DATA				NTIFICATION TE 02 SITE NUMBER 0980603	:696
II. DRINKING WATER SI	JPPLY		-				<del></del>		
D1 TYPE OF DRINKING SUPPL Drack as above 500			02 STATUS				03 (	DISTANCE TO SITE	
	SURFACE	WELL	ENDANGERE	D AFFE	CTED	MONITORED	}	1/-	
COMMUNITY	A _	9 Z	A. =		Ξ	C. =	A -	(mi)	
NON-COMMUNITY		0. <b>Z</b>	D. I	E.	<u> </u>	FI	8.	(mi)	
III. GROUNDWATER			·					<u></u>	
OI GROUNDWATER USE IN VIO		3 B DRINKING Giber sources available	USTRIAL, IRRIGATION	.Γ	OMMERCIAL mited other soul	. INDUSTRIAL, IRRIGA' Ices available)	TION I	D NOT USED. UNUSE	ABLE
02 POPULATION SERVED BY (	GROUND WAT	ER 160,000		03 DISTANO	E TO NEARE	ST DRINKING WATER	WELL	0.5 (mi)	
04 DEPTH TO GROUNDWATER	1	05 DIRECTION OF GROU	INDWATER FLOW	06 DEPTH TO		07 POTENTIAL YIE	٥	08 SOLE SOURCE AO	UIFER
10	(ft)	Generall.	. S+=	OF CONC		OF AQUIFER	1	□ YES 🙎	NO.
O RECHARGE AREA				11 DISCHAR	GE AREA	TS	<del></del>		
T YES   COMMENTS				□ NO	COMMEN	13			
IV. SURFACE WATER			·						
DI SURFACE WATER USE CAN A. RESERVOIR RECF DRINKING WATER	REATION		ECONOMICALLY RESOURCES	Ξ ¢. θ	COMMERCI	AL. INDUSTRIAL	Ξ 0	, NOT CURRENTLY	USED
02 AFFECTED POTENTIALLY	FFECTED BO	DIES OF WATER							
NAME:						AFFECTED		DISTANCE TO SITE	:
Williams	ا مرد	ree.K				1		-0-	(mi
Wilmingto	· W (	reek River						-0-	(mi
- 0			<u> </u>		<del></del>				(m
V. DEMOGRAPHIC AND	PROPERTY	INFORMATION	<del></del>			<del></del>			
O1 TOTAL POPULATION WITHI	٠ .				0:	DISTANCE TO NEAR	EST POPUL	ATION	
ONE (1) MILE OF SITE	·TW B	O (2) MILES OF SITE	THREE (3 C. <u>4</u>	MILES OF			0.1	(mi)	
13 to IMBERIOE BUILDINGS WI	T. IV. T. V.O. O.		· · ·			ST OFF SITE BUILDING	<del></del>		

Nearly all Thunderbolt (pop. -2500) is within one mile and a large portion of garannah is within 4 miles

**ŞEPA** 

## POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

OI STATE OZ SITE NUMBER

G-A 0 980803096

VI. ENVIRONMENTAL INFORMATION DI PERMEABILITY OF UNSATURATED ZONE CORP. Int.  $\times$  4 10 n = 10n1 cm/sec  $\times$  , 8, 10n4 = 10n3 cm/sec  $ilde{Z}$ C 10n4 = 10n3 cm/sec  $\times$  D GREATER THAN 10n3 cm/sec LI ABAMBABILI OK DE BEDADOK I INJO I A A IMPERMEABLE B RELATIVELY IMPERMEABLE II C RELATIVELY PERMEABLE II D VERY PERMEABLE Greater than 1015 on Nect Legalman No. 17 cm sec CO DEFTHIO DEDROCK 04 DEPTH OF CONTAMINATED SOIL ZONE 05 SOIL pH Atleast 10 (A) 07 ONE YEAR 24 HOUR RAINFALL 26 VET PRECIPITATION SITE SLOPE DIRECTION OF SITE SLOPE | TERRAIN AVERAGE SLOPE 3.5 39 FLOOD POTENTIAL SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY SITE IS IN \_\_\_\_\_ YEAR FLOODPLAIN 1.1 DISTANCE TO WETLANDS:5 acre minimum. 12 DISTANCE TO CRITICAL HABITAT (of endangered species) ESTUARINE OTHER \_ (mi) ENDANGERED SPECIES: 13 LAND USE IN VICINITY DISTANCE TO RESIDENTIAL AREAS: NATIONAL STATE PARKS. AGRICULTURAL LANDS PRIME AG LAND COMMERCIAL INDUSTRIAL FORESTS. OR WILDLIFE RESERVES AG LAND A. \_\_\_\_\_\_\_\_(mi) C. \_\_\_\_\_\_(mi) D. \_\_\_\_\_\_(mi) 14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

VII. SOURCES OF INFORMATION (Cité specific references, e.g., state files, sample analysis, reponsi

_	

#### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6 - SAMPLE AND FIELD INFORMATION

	IFICATION
OI STATE	02 SITE NUMBER 0980803646

<b>WEFA</b>	P	ART 6 - SAMPLE AND FIELD INFORMATION	G-A 10980803696
II. SAMPLES TAKEN			
SAMPLE TYPE	SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILAB
GPOUNDWATER			
SURFACE WATER	-	Porganic enalysis by Octa Chem Salt Lake	C'L UT
WASTE		Victa Chem Jail Den	7)
AIR	<u> </u>	conjucted Labor RTP, No	,
RUNOFF		Computation Leeds, RII, No	
SPILL		SAG by Environmental Schence + Eng	iweering
SOIL	. 11	Gainesville, FL	12.199
VEGETATION			
OTHER Sediment	6		12/89
II. FIELD MEASUREMENTS	TAKEN		
1 TYPE	02 COMMENTS		
· · · · · · · · · · · · · · · · · · ·			<u></u>
<del></del>			
V. PHOTOGRAPHS AND MA	APS		
DI TYPE Z GROUND Z AER		02 IN CUSTODY OF NUS CORP	
	TION OF MAPS	Name of organization or individual	
	Nus corp		
V. OTHER FIELD DATA COL		icoloni	
, STIER FIELD DATA COL			
		•	
VI. SOURCES OF INFORMA	TION Cité specific references, e	क्ष state tres, sumple analysis, sucret	
FIT files			
, , , , , , , , , , , ,			

0.554			AZARDOUS WASTE SITE	ICATION	
<b>ŞEPA</b>	SITE INSPECTION REPORT PART 7 - OWNER INFORMATION				2 SITE NUMBER 0 980803696
II. CURRENT OWNER(S)		<del></del>	PARENT COMPANY III ADDIICADIO		<del></del>
O1 NAME		02 D+B NUMBER	08 NAME		09 0 + 8 NUMBER
Thurdesbott Marine	INC		·		
OSSTREET ADDRESS : 150		C4 SIC CODE	C STREET ADDRESS PO Box 950 . etc.		: 1 SIC CODE
OS C:TV	C6 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Thurderbelt	GA	31414			
01 NAME .		02 D+B NUMBER	OB NAME		C9 D + B NUMBER
03 STREET ADDRESS . P. D. Box PFD . SIC .		04 SIC CODE	10 STREET ADDRESS (P 0 Box, RFD # etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
24.445	ــــــــــــــــــــــــــــــــــــــ	03.0 + 9 NUMBER	2211115		00.0 + 0.4114050
01 NAME		02 D+8 NUMBER	08 NAME	 	09 D+8 NUMBER
O3 STREET ADDRESS (P O Box. RFD # etc.)		04 SIC CODE	10 STREET ADDRESS (P 0 Box. RFD = etc.)		1 1 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+8 NUMBER	08 NAME		09 D + 8 NUMBER
03 STREET ADDRESS ; P Q Box. AFD . etc .		04 SIC CODE	10 STREET ADDRESS (P O Box. RFD + etc.)		1 · SIC CODE
05 CITY	OB STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
III. PREVIOUS OWNER(S) (List most recent first)	<del></del>	<b>.</b>	IV. REALTY OWNER(S) (# applicable, list #	nost recent first)	<u> </u>
01 NAME		02 D+8 NUMBER	01 NAME		02 D+8 NUMBER
03 STREET ADDRESS: P 2 Box. AFD . etc.,		04 SIC CODE	O3 STREET ADDRESS (P.O. Box. RFD #. etc.)	<del></del>	04 SIC CODE
05 CITY	OBSTATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	.H	02 0+8 NUMBER	01 NAME		02 0 + B NUMBER
03 STREET ADDRESS P 0 Box 9FD # etc :		04 SIC CODE	03 STREET ADDRESS (P O Box. AFD #. etc.)	<del></del>	04 SIC CODE
05 CITY	08 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME	1	02 D+8 NUMBER	O1 NAME		02 D+8 NUMBER
03 STREET ADDRESS # 2 Box AFD # etc.	<del></del>	04 SIC CCDE	03 STREET ADDRESS (P.O. Box. RFD #. etc.)	<del></del>	04 SIC CODE
OSCITY	06 STATE	07 ZIP CODE	OS CITY	08 STATE	07 ZIP CODE
V. SOURCES OF INFORMATION (Cite speci	nc references.	e g state ties samole a	anavsia, recortsi		

<b>\$EPA</b>
IL CURRENT OPE

### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENT	TEICATION
DI STATE	02 SITE NUMBER
GA	02 SITE NUMBER DYECTE CIBL 96

45 <b>—</b> 17 . 1		PART 8 - OPERA	OR INFORMATION				
II. CURRENT OPERATOR Provide it simprent to	om swaeri	<del></del>	OPERATOR'S PARENT COMPAN	Y "3000020181	<del></del>		
01 NAME	·	02 D+8 NUMBER	10 NAME		1: 3-8 NUMBER		
Thurderbolt Shiphuildi	NS 4 Re	pair	Trinity Indus	tries			
D3 STREET ADDRESS = 3 Box 4F3 V 4/2	U	34 SIC CODE	12 STREET ADDRESS PO Box PFD . HC.	<del></del>	13 SIC 300E		
3126 River Rd			PO BOX 56838	387			
	1	07 ZIP CODE	1	15 STATE	16 ZIP CODE		
Thurderbolt  OB YEARS OF OPERATION TO NAME OF OWNER	GA	31414	Dullas	TX	75356		
08 YEARS OF OPERATION   09 NAME OF OWNER							
III. PREVIOUS OPERATOR(S) Lust most recent	lirst, provide on	ly it ditterent from owners	PREVIOUS OPERATORS' PAREN	T COMPANIES	acondaci <b>a</b> s		
01 NAME	·	02 D+8 NUMBER	10 NAME		11 D+8 NUMBER		
Lorc Kheed Shipbuild 03 STREET ADDRESS , PO BOX , AFOR , OC.	ing		LOCKheed Ship	building			
03 STREET ADDRESS (P 0 Box. RFQ 0. erc )	<del></del>	04 SIC CODE					
3126 River Rd			2929 16th Ave	2 S.W.			
OS CITY	OB STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
Thuriderbelt OB YEARS OF OPERATION 100 NAME OF OWNER	GA	31414	Seattle	WA	98134		
08 YEARS OF OPERATION 09 NAME OF OWNER	DURING THE	S PERIOD					
~1986-1988							
01 NAME	<del></del>	02 D+8 NUMBER	10 NAME		110+B NUMBER		
Latex CONSTRUCT	1000		Same as propert	Ly OWNER			
O3 STREET ADDRESS (P O Box, RFD 4, etc.)	<u> </u>	04 SIC CODE	Same as propert	/	13 SIC CODE .		
					1		
05 CITY	TOG STATE	107 ZIP CODE	114 CITY	15 STATE	16 ZIP CODE		
08 YEARS OF OPERATION   09 NAME OF OWNER	OURING TH	S PERIOD	<del>-                                    </del>		<del></del>		
~1963-1986 W.E.	Hmaza	·					
Q1 NAME	1 10 10 0	O2 D+B NUMBER	10 NAME	<del></del>	11 D-8 NUMBER		
03 STREET ADDRESS (P O Box. RFD # etc.)		04 SIC CODE	12 STREET ADDRESS (P O Box. RFD #. etc.)		13 SIC CODE		
,		1	1				
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE		
	1				·		
08 YEARS OF OPERATION   09 NAME OF OWNER	DURING TH	S PERIOD			<u> </u>		
IV. SOURCES OF INFORMATION (Cate apec		A A state lifes sample service	313 (2000)				
<del></del>			202131	<del></del>			
EPA, State + FIT	File	L,					

<b>≎EPA</b>	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 9 - GENERATOR/TRANSPORTER INFORMATION			OFFICE OF STATE OF ST	
II. ON-SITE GENERATOR					
31 NAME		02 D + B NUMBER			
CB STREET ADDRESS (Fig. 8 / H2 / H2	- <u>-</u> -	34 SIC DODE			
05 CITY	G6 STATE	OT ZIP CCCE			
III. OFF-SITE GENERATOR(S)					
OT NAME		02 D+8 NUMBER	0! NAME		P38MJ# 8+0 50
03 STREET ADDRESS P.D. Box. PFD + arc -		04 SIC CODE	03 STREET ADDRESS P.C. Box. RFD # 410 .		C4 SIC CODE
OS CITY	O6 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
O1 NAME		02 D+8 NUMBER	01 NAME		02 D+8 NUMBER
03 STREET ADDRESS P.O. Box. RFD . etc.	<del></del>	04 SIC CODE	C3 STREET ADDRESS -P O. Box. RFD # etc :		04 SIC CODE
35 CITY	06 STATE	07 ZIP CODE	05 CITY	O6 STATE	07 ZIP CODE
IV. TRANSPORTER(S)		<u> </u>			<u></u>
O1 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS P 2 Box 2FD 4 etc.		04 SIC CODE	03 STREET ADDRESS ,P O Box. RFD # etc ;		D4 SIC CCOE
05 CITY	OB STATE	07 ZIP COOE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+8 NUMBER	01 NAME		02 0+8 NUMBER
03 STREET ADDRESS P 0 302 RFD . etc.)		04 SIC CODE	03 STREET ADDRESS (P O Box, RFD # etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	OS STATE	07 ZIP CODE
V. SOURCES OF INFORMATION (Cite )	oecific interesses	e di State Mesi samoje analisti	is incont.	1	<u> </u>
The state of the s	Decine violation		, 450.31		
		•			•
			,		

9	FPΔ
V	

#### POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES

I. IDEN	IFICATION
01 STATE	02 SITE NUMBER
GA	098208203646

ALLY.	PART 10 - PAST RESPONSE ACTIVITIES		CA 109806:03646
II. PAST RESPONSE ACTIVITIES			
01 T. A. WAITER SUPPLY 10.03ED 04 DESCRIPTION	J2 DATE	03 AGENCY	
	Documented (NO)		
01 TB TEMPORARY WATER SUPPLY PROVI	DECLINENTE (NO) DED 32 CATE	03 AGENCY	
04 DESCRIPTION			
01 _ C PERMANENT WATER SUPPLY PROVID	DED 02 DATE	03 AGENCY	
04 DESCRIPTION $\sim  ho$			
01 TO SPILLED MATERIAL REMOVED	02 DATE	03 AGENCY	
$\mathcal{N}_{\mathcal{D}}$			
01 Z E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY	Dunie by PRP
	inated surface soils	removed	1
01 _ F WASTE REPACKAGED	02 DATE	03 AGENCY	
04 DESCRIPTION $igwedge \mathcal{D}$			
01 Z G. WASTE DISPOSED ELSEWHERE	O2 DATE	03 AGENCY	
04 DESCRIPTION PD ()			
01 TH. ON SITE BURIAL	02 DATE	03 AGENCY	
04 DESCRIPTION P			
01 I I IN SITU CHEMICAL TREATMENT	· 02 DATE	03 AGENCY	
04 DESCRIPTION			
01 Z J. IN SITU BIOLOGICAL TREATMENT	02 DATE	03 AGENCY	
04 DEȘCRIPTION (V 1)			
01 Z K. IN SITU PHYSICAL TREATMENT	02 DATE	03 AGENCY	
04 DESCRIPTION NO			
O1 .I L. ENCAPSULATION	02 DATE	03 AGENCY	
04 DEŚCRIPTION			
01 I M EMERGENCY WASTE TREATMENT	02 DATE	03 AGENCY	
94 DESCRIPTION $\mathcal{N}_{\mathcal{O}}$			
D1 , N CUTOFF WALLS	G2 CATE	03 AGENCY	
04 DESCRIPTION			
01 II DIEMERGENOVICIKING SURFACE WATE	R DIVERSION 92 DATE	03 AGENCY	
C4 DESCRIPTION $\mathcal{N}\mathfrak{D}$			
01 TP CUTOFF TRENCHES SUMP 04 DESCRIPTION	02 DATE	03 AGENCY	
$\mathcal{W}\mathcal{O}$			
01 I Q SUBSURFACE CUTOFF WALL 04 DESCRIPTION	D2 SATE	03 AGENCY	
$ \omega_{\mathcal{A}} $ Description $ \omega_{\mathcal{A}} $			

<b>\$EPA</b>	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES	1. IDENTIFICATION 01 STATE 02 SITE NUMBER GA 0980803696
II PAST RESPONSE ACTIVITIES Continued		
O1 II A BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
NO		•
01 II 5 CAPPING COVERING 04 DESCRIPTION PD	02 DATE	03 AGENCY
0: IT BULK TANKAGE REPAIRED 04 DESCRIPTION ND	O2 DATE	03 AGENCY
01 TU GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
01 I V BOTTOM SEALED 04 DESCRIPTION PA	02 DATE	03 AGENCY
01 I W GAS CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
01 Z X. FIRE CONTROL 04 DESCRIPTION	O2 DATE	03 AGENCY
01 T.Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 Z Z. AREA EVACUATED 04 DESCRIPTION		03 AGENCY
01 T : ACCESS TO SITE RESTRICTED 04 DESCRIPTION . NP	•	03 AGENCY
01 = 2. POPULATION RELOCATED 04 DESCRIPTION  NO	02 DATE	03 AGENCY
01 3 OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE	03 AGENCY
III. SOURCES OF INFORMATION -C.re specific -er	erances e g state tes sample analysis reports	
FIT files		



# POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

I. IDENTIFICATION

SEPA	SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION	GA 09E0E03696	
II. ENFORCEMENT INFORMATION			
THE PAST REGULATORY ENFORCEMENT ACT	.tv		
DZ DESCRIPTION OF FEDERAL CHATE LUCA	LIFE JULY 10 FY ENFORCEMENT ACTION		
		• .	
		,	
•	•		
•			
:	·		
·			
,			
III. SOURCES OF INFORMATION Cale	specific (elerences, e.g., state free, sample analysis, repons)		

### **APPENDIX**

### I. FEEDSTOCKS

CAS Number	Chemical Name	CAS Number	Chemical Name	CAS Number	Chemical Name
1. 7664-41-7	Ammonia	14. 1317-38-0	Cupric Oxide	27, 7778-50-9	Potassium Dichromate
2, 7440-36-0	Antimony	15. 7758-98-7	Cupric Sulfate	28. 1310-58-3	Potassium Hydroxide
3. 1309-64-4	Antimony Trioxide	16. 1317-39-1	Cuprous Oxide	29 115-07-1	Propylene
4, 7440-38-2	Arsenic	17. 74-85-1	Ethylene	30. 10588-01-9	Sodium Dichromate
5. 1327-53-3	Arsenic Triaxide	18. 7647-01-0	Hydrochloric Acid	31. 1310-73-2	Sodium Hydroxide
6. 21109-95-5	Barium Suifide	19. 7664-39-3	Hydrogen Fluoride	32. 7646-78-8	Stannic Chloride
7. 7726-95-6	Bromine	20. 1335-25-7	Lead Oxide	33. 7772-99-8	Stannous Chloride
8. 106-99-0	Butadiene	21. 7439-97-6	Mercury	34. 7664-93-9	Sulfuric Acid
9. 7440-43-9	Cadmium	22. 74-82-8	Methane	35. 108-88-3	Toluene
10. 7782-50-5	Chlorine	23.91.20-3	Napthalene	36, 1330-20-7	Xylene
11. 12737-27-8	Chromite	24. 7440-02-0	Nickel	37. 7646-85-7	Zinc Chloride
12. 7440-47-3	Chromium	25. 7697-37-2	Nitric Acid	38. 7733-02-0	Zinc Sulfate
13. 7440-48-4	Cobalt	26. 7723-14-0	Phosphorus	}	

46. 1327-53-3

Arşenic Trioxide

II. HAZARDOUS SUBSTANCES					
CAS Number	Chemical Name	CAS Number	Chemical Name	CAS Number	Chemical Name
1. 75-07-0	Acetaldehyde	47. 1303-33-9	Arsenic Trisulfide	92, 142-71-2	Cupric Acetate
2. 64-19-7	Acetic Acid	48. 542-62-1	Barium Cyanide	93.12002-03-8	Cupric Acetoarsenite
3. 108-24-7	Acetic Anhydride	49. 71-43-2	Benzene	94. 7447-39-4	Cupric Chloride
4.75-86-5	Acetone Cyanohydrin	50. 65-85-0	Benzoic Acid	95. 3251-23-8	Cupric Nitrate
5. 506-96-7	Acetyl Bromide	51. 100-47-0	Benzonitrile	96. 5893-66-3	Cupric Oxalate
6. 75-36-5	Acetyl Chloride	52. 98-88-4	Benzoyi Chloride	97. 7758-98-7	Cupric Sulfate
7. 107-02-8	Acralein	53. 100 <del>-44-</del> 7	Benzyl Chloride	98. 10380-29-7	Cupric Sulfate Ammoniated
8. 107-13-1	Acrylonitrile	54. 7440-41-7	Beryllium	99. 815-82-7	Cupric Tartrate
9. 124-04-9	Adipic Acid	55. 7787-47-5	Beryllium Chloride	100.506-77-4	Cyanogen Chloride
10. 309-00-2	Aldrin	56. 7787-49-7	Beryllium Fluoride	101, 110-82-7	Cyclohexane
11. 10043-01-3	Aluminum Sulfate	57. 13597-99-4	Beryllium Nitrate	102, 94-75-7	2,4-D Acid
12. 107-18-6	Aliyi Aicohol	58. 123 <del>-86-4</del>	Butyl Acetate	103. 94-11-1	2,4-D Esters
13, 107-05-1	Allyt Chloride	59. 84-74-2	n-Butyl Phthalate	104.50-29-3	DOT
14. 7664-41-7	Ammonia	60. 109-73-9	Butylamine	105, 333-41-5	Diazinon
15. 631-61-8	Ammonium Acetate	61. 107-92-6	Butyric Acid	106, 1918-00-9	Dicamba :
16. 1863-63-4	Ammonium Benzoate	62. 543-90-8	Cadimium Acetate	107, 1194-65-6	Dichlobenil
17. 1066-33-7	Ammonium Bicarbonate	63. 7789-42-6	Cadmium Bromide	108, 117-80-6	Dichlone
18. 7789-09-5	Ammonium Bichromate	64. 10108-64-2	Cadmium Chloride	109, 25321-22-6	Dichlorobenzene (all isomers)
19.1341-49-7	Ammonium Bifluoride	65. 7778 <del>-44</del> -1	Calcium Arsenate	110. 266-38-19-7	Dichloropropane (all isomers)
20. 10192-30-0	Ammonium Bisulfite	66. 52740-16-6	Calcium Arsenite	111. 26952-23-8	Dichloropropene (all isomers)
21. 1111-78-0	Ammonium Carbamate	67. 75-20-7	Calcium Carbide	112.8003-19-8	Dichloropropene-
22. 12125-02-9	Ammonium Chloride	<b>68</b> . 13765-19-0	Calcium Chromate		Dichtoropropane Mixture
23. 7788-98-9	Ammonium Chromate	69. 592-01-8	Calcium Cyanide	113. 75-99-0	2-2-Dichtoropropionic Acid
24. 3012-65-5	Ammonium Citrate, Dibasic	70. 26264-06-2	Calcium Dodecylbenzene	114, 62-73-7	Dichlorvos
25. 13826-83-0	Ammonium Fluoborate		Sulfonate	115, 60-57-1	Dieldrin
26. 12125-01-8	Ammonium Fluoride	71. 7778-54-3	Calcium Hypochlorite	116, 109-89-7	Diethylamine
27. 1336-21-6	Ammonium Hydroxide	72. 133-06-2	Captan	117, 124 <del>-4</del> 0-3	Dimethylamine
28. 6009-70-7	Ammonium Oxatate	73. 63-25-2	Carbaryl	118. 25154-54-5	Dinitrobenzene (all isomers)
29. 16919-19-0	Ammonium Silicofluoride	74. 1563-66-2	Carbofuran	119.51-28-5	Dinitrophenol
30. 7773- <b>06-0</b>	Ammonium Sulfamate	75. 75-15-0	Carbon Disutfide	120. 25321-14-6	Dinitrotoluene (ail isomers)
31. 12135-76-1	Ammonium Sulfide	76. 56-23-5	Carbon Tetrachloride	121.85-00-7	Diquat
32. 10196-04-0	Ammonium Sulfite	77. 57-74-9	Chlordane	122. 298-04-4	Disulfatan
33. 14307 <b>-43-8</b>	Ammonium Tartrate	78. 7782·50·5	Chtorine	123, 330-54-1	Diuron
34: 1762-95-4	Ammonium Thiocyanate	79. 108-90-7	Chlorobenzene	124, 27176-87-0	Dodecylbenzenesulfonic Acid
35. 7783-18 <b>-8</b>	Ammonium Thiosulfate	80. 67-66-3	Chioroform	125, 115-29-7	Endosulfan (all isomers)
36, 6 <b>28-63-7</b>	Amyl Acetate	81. 7790-94-5	Chlorosulfonic Acid	126. 72-20 <del>-8</del>	Endrin and Metabolites
37, 62-53-3	Aniline	82. 2921-88-2	Chlorpyrifos	127, 106-89-8	Epichlorohydrin
38. 7647-18-9	Antimony Pentachloride	83. 1066-30-4	Chromic Acetate	128.563-12-2	Ethion
39. 7789-61-9	Antimony Tribromide	84. 7738-94-5	Chromic Acid	129, 100-41-4	Ethyl Benzene
40. 10025-91-9	Antimony Trichloride	85. 10101-53-8	Chromic Sulfate	130, 107-15-3	Ethylenediamine
41 7783-56-4	Antimony Triffuorida	86.10049-05-5	Chromous Chloride	131, 106-93-4	Ethylene Dibromide
42. 1309-64-4	Antimony Trioxide	87. 544-18-3	Cobaltous Formate	132, 107-06-2	Ethylene Dichloride
43. 1303-32-8	Arsenic Disulfide	88. 14017-41-5	Cobaltous Sulfamate	133, 60-00-4	EDTA
44, 1303-28-2	Arsenic Pentoxide	89. 56-72-4	Coumaphos	134, 1185-57-5	Ferric Ammonium Citrate
45, 7784-34-1	Arsenic Trichloride	90. 1319-77-3	Cresol	135. 2944-67-4	Ferric Ammonium Okaiate
46 1327.53.2	Arragia Triavida	04 4470 202	A	120 7705 00 0	Facilia Objection

Crotonaldehyde

91,4170-30-3

136, 7705-08-0

Ferric Chioride

### II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name	CAS Number	Chemical Name	CAS Number	Chemical Name
137 7783-50-8	Ferric Fluoride	192.74-89-5	Monomethylamine	249. 7632-00-0	Sodium Nitrate
138, 10421-48-4	Ferric Nitrate	193. 300-76-5	Nated	250. 7558-79-4	Sodium Phosphate, Dipasic
139. 10028-22-5	Ferric Sulfate	194. 91-20-3	Naphthalene	251. 7601-54-9	Sodium Phosphate, Tribasic
140. 10045-89-3	- Ferrous Ammonium Sulfate	195. 1338-24-5	Naphthenic Acid	252, 10102-18-8	Sodium Selenite
141 7758-94-3	Ferrous Chioride	196, 7440-02-0	Nickel	253, 7789-06-2	Strontium Chromate
142, 7720-78-7	Rempus Suifate	197. 15 <b>699-</b> 18-0 <sup>-</sup>	Nickel Ammonium Sulfate	254. 57-24-9	Strychnine and Salts
143. 206-44-0	Fluoranthene	198. 37211-05-5	Nickel Chlaride	255, 100-420-5	Styrene
144.50-00-0	Forma deny de	199, 12054-48-7	Nickel Hydroxide	256, 12771-08-3	Suifur Monochloride
145.64-18-6	Formic Acid	200 14216-75-2	Nickel Nitrate	257. 7664-93-9	Sulfurio Acid
146.110-17-8	Fumaric Acid	201. 7786-81-4	Nickel Suifate	258.93-76-5	2,4,5-T Acid
147. 98-01-1	Furfurai	202. 7697-37-2	Nitric Acid	259. 2008-46-0	2,4,5-T Amines
148.36-50-0	Guthion	203.98-95-3	Nitrobenzene	260.93-79-8	2,4,5-T Esters
149. 76-44-8	Heptachior )	204. 10102-44-0	Nitrogen Dioxide	261. 13560-99-1	
150. 118-74-1	Hexachlorobenzene	205. 25154-55-6	Nitrophenol (all isomers)	262.93-72-1	2,4,5-TP Acid
151 87-68-3	Hexachiorobutadiene	206. 1321-12-6	Nitrotoluene	263. 32534-95-5	
152.67-72-1	Hexachioroethane	207 30525-89-4	Paraformaldehyde	264. 72-54-8	TOE
153 70-30-4 154 77-47-4	Hexachlorophene	208. 56-38-2	Parathion	265.95.94.3	Tetrachlorobenzena Tetrachloroethana
	Hexachlorocyclopentadiene	209. 608-93-5	Pentachlorobenzene	266. 127-18-4	
155. 7647-01-0	Hydrochloric Acid	210. 87-86-5	Pentachiorophenol	267. 78-00-2	Tetraethyl Lead Tetraethyl Pyrophosphate
156, 7664-39-3	(Hydrogen Chloride)	211. 85-01-8	Phenanthrene	268. 107-49-3	Thallium (I) Suifate
130.7004-39-3	Hydroflugric Acid (Hydrogen Flugride)	212. 108-95-2	Phenol	269. 7446-18-6 270. 108-88-3	Toluene
157, 74-90-8	Hydrogen Cyanide	213. 75-44-5	Phosgene		Toxaphene
158. 7783-06-4	Hydrogen Sulfide	214. 7664-38-2 215. 7723-14-0	Phospharic Acid	271,8001-35-2 272,12002-48-1	Trichlorobenzene (all isomers)
159. 78-79-5	Isoprene	216, 10025-87-3	Phosphorus Phosphorus Oxychloride	273, 52-68-6	Trichlorfon
160, 42504-46-1	Isopropanolamine	217. 1314-80-3	Phosphorus Pentasulfide	274, 25323-89-1	
	Dodecylbenzenesulfonate	218. 7719-12-2	Phosphorus Trichloride	275, 79-01-6	Trichloroethylene
161, 115-32-2	Keithane	219. 7784-41-0	Potassium Arsenate	276. 25167-82-2	
162, 143-50-0	Kepone	220. 10124-50-2	Potassium Arsenite	277. 27323-41-7	·
163. 301-04-2	Lead Acetate	221. 7778-50-9	Potassium Bichromate		Dodecylbenzenesulfonate
164, 3687-31-8	Lead Arsenate	222, 7789-00-6	Potassium Chromate	278, 121-44-8	Triethylamine
165, 7758-95-4	Lead Chloride	223, 7722-64-7	Potassium Permanganate	279. 75-50-3	Trimethylamine
166, 13814-96-5	Lead Fluoborate	224, 2312-35-8	Propargite	280. 541-09-3	Uranyl Acetate
167. 7783-46-2	Lead Fluoride	225. 79-09-4	Propionic Acid	281. 10102-06-4	Uranyi Nitrate
168, 10101-63-0	Lead lodide	226. 123-62-6	Propionic Anhydride	282, 1314-62-1	Vanadium Pentoxide
169. 18256-98-9	Lead Nitrate	227, 1336-36-3	Polychlorinated Biphenyls	283. 27774-13-6	Vanadyl Sulfate
170. 7428-48-0	Lead Stearate	228. 151-50-8	Potassium Cyanide	284. 108-05-4	Vinyl Acetate
171.15739-80-7	Lead Sulfate	229. 1310-58-3	Potassium Hydroxide	285. 75-35-4	Vinylidene Chloride
172, 1314-87-0	Lead Sulfide	230. 75-56-9	Propylene Oxide	286. 1300-71-6	Xylenal
173, 592-87-0	Lead Thiocyanate	231. 121-29-9	Pyrethrins	287.557-34-6	Zinc Acetate
174.58-89-9	Lindane	232. 91-22-5	Quinoline	288.52628-25-8	
175. 14307-35-8	Lithium Chromate	233. 108-46-3	Resorcinol	289, 1332-07-6 290, 7699-45-8	Zinc Borate Zinc Bromide
176, 121-75-5	Maithion	234. 7446-08-4	Selenium Oxide	291, 3486-35-9	<del>-</del>
177. 110-16-7	Maleic Acid	235. 7761-88-8	Silver Nitrate	292. 7646-85-7	Zinc Carbonate Zinc Chloride
178. 108-31-6	Maleic Anhydride	236. 7631-89-2	Sodium Arsenate	293, 557-21-1	Zinc Cyanide
179. 2032-65-7	Mercaptodimethur	237, 7784-46-5 238, 10588-01-9	Sodium Arsenite Sodium Bichromate	294, 7783-49-3	Zinc Fluoride
180.592-04-1	Mercuric Cyanide	239, 1333-83-1	Sodium Biffuoride	295.557-41-5	Zinc Formate
181. 10045-94-0	Mercuric Nitrate	240. 7631-90-5	Sodium Bisulfite	296.7779-86-4	Zinc Hydrosulfite
182.7783-35-9	Mercuric Sulfate	241, 7775-11-3	Sodium Chromate	297. 7779-88-6	Zinc Nitrate
183, 592-85-8 184, 10415-75-5	Mercuric Thiocyanate  Mercurous Nitrate	242, 143-33-9	Sodium Cyanide	298, 127-82-2	Zinc Phenoisulfonate
		243, 25155-30-0	Sodium Dodecylbenzene	299. 1314-84-7	Zinc Phosphide
185, 72-43-5 186, 74-93-1	Methoxychlor Methyl Mercaptan		Suifonate	300.16871-71-9	
187, 80-62-6	Methyl Methacrylate	244, 7681-49-4	Sodium Fluoride	301. 7733-02-0	Zinc Sulfate
188. 298-00-0	Methyl Parathion	245. 16721-80-5	Sodium Hydrosulfide	302.13746-89-9	Zirconium Nitrate
189. 7786-34-7	Mevinphos	246, 1310-73-2	Sodium Hydroxide	303. 16923-95-8	
190. 315-18-4	Mexacarbate	247, 7681-52-9	Sodium Hypochlorite		Zirconium Sulfate
191. 75-04-7	Monoethylamine	248, 124-41-4	Sodium Methylate	305. 10026-11-6	Zirconium Tetrachloride
	•		•		

.